

# Construction Notice for the Horizon 138 kV Transmission Line Extension Project



An **AEP** Company

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BOUNDLESS ENERGY<sup>SM</sup>

PUCO Case No. 24-0670-EL-BNR

Submitted to:  
The Ohio Power Siting Board  
Pursuant to Ohio Administrative Code Section  
4906-6-05

Submitted by:  
AEP Ohio Transmission Company, Inc.

July 5, 2024

# Construction Notice for the Horizon 138 kV Transmission Line Extension Project

## Construction Notice

### AEP Ohio Transmission Company, Inc. Horizon 138 kV Extension Project

#### 4906-6-05

AEP Ohio Transmission Company, Inc. (the “Company”) provides the following information to the Ohio Power Siting Board (“OPSB”) pursuant to Ohio Administrative Code Section 4906-6-05.

#### 4906-6-5(B) General Information

##### B(1) Project Description

**The name of the project and applicant's reference number, names and reference number(s) of resulting circuits, a brief description of the project, and why the project meets the requirements for a Construction Notice.**

The Company has identified the need to construct the Horizon 138 kV Transmission Line Extension Project (the “Project”), in the City of New Albany, Licking County, Ohio. The purpose of the Project is to provide looped 138 kV service to the new Horizon distribution substation from the 138 kV circuit of the Jug-Corridor 345 kV transmission line to provide electricity to a specific customer. The 0.1-mile transmission line will require four new structures on properties owned by the Company and customer. The location of the Project is shown on Figure 1 and Figure 2 in Appendix A.

The Project meets the requirements for a Construction Notice because it is within the types of projects defined by items (1)(d)(i) of Ohio Administrative Code Section 4906-1-01 Appendix A of the Application Requirement Matrix For Electric Power Transmission Lines:

*(1) New construction, extension, or relocation of single or multiple circuit electric power transmission line(s), or upgrading existing transmission or distribution line(s) for operation at a higher transmission voltage, as follows:*

*(d) Line(s) primarily needed to attract or meet the requirements of a specific customer or customers, as follows:*

*i. The line is completely on property owned by the specific customer or the applicant.*

The Project has been assigned PUCO Case No. 24-0670-EL-BNR.

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### **B(2) Statement of Need**

**If the proposed project is an electric power transmission line or gas or natural gas transmission line, a statement explaining the need for the proposed facility.**

A customer has requested a new 138/34.5 kV distribution substation, Horizon Station, to serve their facility requiring 50 MW of initial load, with growth up to 200 MW of peak demand. To serve the customer's initial load, the Company will be required to build approximately 0.1 mile of greenfield 138 kV single-circuit transmission line, which is the subject of this request, connecting the existing double-circuit Jug Street-Corridor 138 kV Transmission Line to the Horizon Station. The customer has requested an in-service date in March 2025 for the initial load.

Failure to move forward with the proposed project will result in the inability to serve the customer's load expectations and thereby jeopardize the customer's plans in the New Albany area (potentially 200 MW peak).

The need and solution were presented and reviewed with stakeholders at the June 15, 2022 PJM SRRTPEP and May 9, 2023 PJM TEAC Meetings. A supplement upgrade number is yet to be assigned by PJM. This Project was included in the AEP Ohio Transmission Company, Inc. most recent 2024 Long-Term Forecast Report on page 102 (FE-T9) (Appendix B).

### **B(3) Project Location**

**The applicant shall provide the location of the project in relation to existing or proposed lines and substations shown on an area system map of sufficient scale and size to show existing and proposed transmission facilities in the Project Area.**

The location of the Project in relation to existing and proposed transmission lines and substation is shown in Figure 1 of Appendix A.

### **B(4) Alternatives Considered**

**The applicant shall describe the alternatives considered and reasons why the proposed location or route is best suited for the proposed facility. The discussion shall include, but not be limited to, impacts associated with socioeconomic, ecological, construction, or engineering aspects of the project.**

The proposed Horizon distribution substation is located on customer property and aligns with the layout of the customer's proposed development plans. Due to the location of the Horizon distribution substation, the 138 kV cut-in alignment was selected because it provides the most direct route to the station bays. In addition, the proposed Project will result in no impacts to wetlands, streams, or known cultural resource areas eligible for the National Register of Historic Places (NRHP). Therefore, the Project represents the most suitable location and is the most appropriate solution for meeting the Company's and specific customer's needs in the area.

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### **B(5) Public Information Program**

**The applicant shall describe its public information program to inform affected property owners and tenants of the nature of the project and the proposed timeframe for project construction and restoration activities.**

The Company maintains a website (<http://aeptransmission.com/ohio/>) on which an electronic copy of this CN is available. A letter including Project and filing details will be sent to officials and each property owner and affected tenant within the planned site or contiguous to the planned site within seven days of filing. An electronic copy of the CN will be served to the public library in each political subdivision affected by this Project. The Company also retains land agents who will discuss Project timelines, construction and restoration activities with affected owners and tenants.

### **B(6) Construction Schedule**

**The applicant shall provide an anticipated construction schedule and proposed in-service date of the project.**

Construction of the Project is planned to begin in October 2024, and the anticipated in-service date will be March 2025.

### **B(7) Area Map**

**The applicant shall provide a map of at least 1:24,000 scale clearly depicting the facility with clearly marked streets, roads, and highways, and an aerial image.**

Figure 1 in Appendix A provides the proposed Project area on a map of 1:24,000-scale (1 inch equals 2,000 feet), showing the Project on the United States Geological Survey (USGS) 7.5-minute topographic map of the Jersey, Ohio quadrangle. Figure 2 in Appendix A shows the Project Area on recent aerial photography, dated 2021, as provided by ESRI World Imagery at a scale of 1:6,000 scale (1 inch equals 500 feet).

To visit the Project site from Columbus, Ohio, take I-670 East for approximately 6 miles to Exit 10A-B. Bear left on the ramp for OH-161 toward Easton Way. After 1.7 miles, take Exit 30-33, and head right on the ramp for OH-161 toward New Albany/Worthington. Continue for 2.8 miles before exiting right toward New Albany. Continue east on OH-161 for 8.4 miles and then take the ramp on the right following the signs for Beech Road/Township Road 88. Turn left on Beech Road SW. After 1.3 miles, turn right onto Jug Street/County Highway 22. Cross under the Jug-Corridor 138 kV transmission line after approximately 0.2 mile. The Project is located along the transmission line approximately 0.5 mile north of Jug Street at latitude 40.105067, longitude -82.748146°.

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### B(8) Property Agreements

The applicant shall provide a list of properties for which the applicant has obtained easements, options, and/or land use agreements necessary to construct and operate the facility and a list of the additional properties for which such agreements have not been obtained.

A list of properties required for the Project is provided in the table below.

<b>Property Parcel Number</b>	<b>Agreement Type</b>	<b>Easement/ Option Obtained (Yes/No)</b>
095-111618-04.000	Existing Easement Agreement	Yes
095-111756-00.010	New Easement Agreement	No
095-111756-00.017	Company Property	Not Applicable

### B(9) Technical Features

The applicant shall describe the following information regarding the technical features of the project:

**B(9)(a) Operating characteristics, estimated number and types of structures required, and right-of-way and/or land requirements.**

#### B(9) Technical Features

The applicant shall describe the following information regarding the technical features of the project:

**B(9)(a) Operating characteristics, estimated number and types of structures required, and right-of-way and/or land requirements.**

The transmission line construction is estimated to include the following:

Voltage: 138 kV  
Conductors: (3) Twin-Bundled 1590 KCMIL 54/19 ACSR FALCON CONDUCTOR  
Static Wire: 159 KCMIL 12/7 ACSR GUINEA CONDUCTOR  
Insulators: Polymer  
ROW Width: 60 feet  
Structure Type: (3) single circuit, monopole deadend, custom concrete pier foundations and (1) single circuit, direct-embed, two pole structure

**B(9)(b) Electric and Magnetic Fields**

**For electric power transmission lines that are within one hundred feet of an occupied residence or institution, the production of electric and magnetic fields during the operation of the proposed electric power transmission line.**

No occupied residences or institutions are located within 100 feet of the Project.

**B(9)(c) Project Cost**

**The estimated capital cost of the project.**

The capital cost estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately \$1,716,000 using a Class 4 estimate. Pursuant to the PJM OATT, the costs for this Project will be recovered in the AEP Ohio Transmission Company Inc.'s FERC formula rate (Attachment H-20 to the PJM OATT) and allocated to the AEP Zone.

**B(10) Social and Economic Impacts**

**The applicant shall describe the social and ecological impacts of the project:**

**B(10)(a) Land Use Characteristics**

**Provide a brief, general description of land use within the vicinity of the proposed project, including a list of municipalities, townships, and counties affected.**

An aerial photograph of the Project vicinity is provided as Figure 2 in Appendix A. The Project is located in City of New Albany, Licking County, Ohio. Land use in the Project Area consists of fallow properties owned and planned for development by the customer, agricultural land, wooded areas, and scattered residences. The closest residence is approximately 1,500 feet from the Project.

**B(10)(b) Agricultural Land Information**

**Provide the acreage and a general description of all agricultural land, and separately all agricultural district land, existing at least sixty days prior to submission of the application within the potential disturbance area of the project.**

The Project does not cross any current agricultural land. The Licking County Auditor confirmed that the Project parcels are not registered as Agricultural District Land on May 22, 2024. No impacts to agricultural parcels are proposed as part of the Project.

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### **B(10)(c) Archaeological and Cultural Resources**

**Provide a description of the applicant’s investigation concerning the presence or absence of significant archaeological or cultural resources that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.**

The Company’s consultant completed a Phase I Archaeological Investigation of the Project Area. Ohio Archaeological Inventory (OAI) #33LI2242 was previously identified and recommended as not eligible for listing in the NRHP. The Ohio Historic Preservation Office (“SHPO”) concurred that the Project should have no adverse effect on historic properties and no further coordination is necessary unless the Project changes or additional resources are discovered during implementation of the Project. Correspondence with the SHPO is provided in Appendix C.

### **B(10)(d) Local, State, and Federal Agency Correspondence**

**Provide a list of the local, state, and federal governmental agencies known to have requirements that must be met in connection with the construction of the project, and a list of documents that have been or are being filed with those agencies in connection with siting and constructing the project.**

A Notice of Intent will be filed with the Ohio Environmental Protection Agency for authorization of construction storm water discharges under General Permit OHC000006. The Company will implement and maintain best management practices as outlined in the Project-specific Storm Water Pollution Prevention Plan (“SWPPP”) to minimize erosion control sediment to protect surface water quality during storm events.

No streams or wetlands are located in the Project Area (see Appendix D). Therefore, the Project will not require a Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers with Section 401 Water Quality Certification from the Ohio Environmental Protection Agency (OEPA).

The FEMA Flood Insurance Rate Map was reviewed to identify any floodplains/flood hazard areas that have been mapped within the Project Area (specifically, map number **39049C0230K**). Based on this mapping, no mapped FEMA floodplains are located in the Project Area. Therefore, no floodplain permit will be required for this Project.

There are no other known local, state, or federal requirements that must be met prior to commencement of the proposed Project.

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### **B(10)(e) Threatened, Endangered, and Rare Species**

**Provide a description of the applicant's investigation concerning the presence or absence of federal and state designated species (including endangered species, threatened species, rare species, species proposed for listing, species under review for listing, and species of special interest) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.**

As part of the ecological study completed for the Project, a coordination letter was submitted to the USFWS Ohio Ecological Services Field Office seeking technical assistance on the Project for potential impacts to threatened or endangered species. The October 21, 2022 response letter from the USFWS (see Appendix C) indicated all projects in the State of Ohio lie within the range of the federally endangered Indiana bat and northern long-eared bat. In Ohio, presence of these species is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document probable absence. The USFWS response letter states that, should the Project site contain trees  $\geq 3$  inches diameter at breast height (dbh), the trees be saved whenever possible. If any caves or abandoned mines may be disturbed, further coordination is requested. If no caves or abandoned mines are present and trees  $\geq 3$  inches dbh cannot be avoided, the USFWS recommends that removal of trees  $\geq 3$  inches dbh only occur between October 1 and March 31 in order to avoid adverse effects to these species. If implementation of seasonal tree clearing is not possible, the USFWS recommends summer presence/absence surveys be conducted between June 1 and August 15. Based on current USFWS Ohio Field Office guidance, a desktop evaluation of potential hibernaculum was conducted in the Project area. No hibernaculum or caves were located in the Project area based on the site reconnaissance and review of documented mines and karst features. Additionally, no tree clearing is anticipated as part of the Project. Therefore, no impacts are anticipated for the Indiana bat, northern long-eared bat, or tricolored bat. Due to the Project type, size, and location, USFWS does not anticipate adverse effects to any federally endangered, threatened, proposed, or candidate species.

A coordination letter was submitted to the Ohio Department of Natural Resources (“ODNR”) Division of Wildlife (“DOW”) Ohio Natural Heritage Program (“ONHP”) and the ODNR - Office of Real Estate seeking an environmental review of the proposed Project for potential impacts on state-listed and federally-listed threatened or endangered species. Correspondence from ODNR’s DOW/OHNP and the ODNR – Office of Real Estate was received on November 15, 2022 (see Appendix C).

According to the ODNR-DOW, the Project is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. ODNR also commented that the Project is in the vicinity of records for the northern long-eared bat. Due to the record of this species in the vicinity of the Project and related buffer area, additional summer surveys would not constitute presence/absence in the area. The ODNR recommends cutting between October 1 and March 31. If cutting must occur during summer months, the ODNR recommends additional coordination with ODNR. No tree clearing is anticipated as part of the Project. Therefore, no impacts are anticipated for bat species.

The ODNR-DOW indicated that the Project is within the range of the lake chubsucker (*Erimyzon sucetta*), a state threatened fish. Due to no in-water work and habitat, this species is not anticipated to be impacted

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by the Project. In addition, the ODNR lists the Project in the range of the northern harrier (*Circus hudsonis*), a state endangered bird. Based on the ecological survey, habitat for this species is not located in the Project Area, therefore no impacts to the northern harrier are anticipated.

### **B(10)(f) Areas of Ecological Concern**

**Provide a description of the applicant's investigation concerning the presence or absence of areas of ecological concern (including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.**

The ODNR-DOW response indicated no areas of ecological concern in or near the Project Area.

Correspondence received from the USFWS indicated no federal wilderness areas, wildlife refuges, or designated critical habitat in the Project vicinity (see Appendix B).

FEMA Flood Insurance Rate Maps were consulted to identify any floodplains/flood hazard areas that have been mapped in the Project Area (specifically, map number **39049C0230K**). Based on these maps, no mapped FEMA floodplains are located in the Project area.

Wetland and stream delineation field surveys were completed within the Project area by the Company's consultant in February 2023. No streams or wetlands were identified within the Project Area (see Appendix D).

### **B(10)(g) Unusual Conditions**

**Provide any known additional information that will describe any unusual conditions resulting in significant environmental, social, health, or safety impacts.**

To the best of the Company's knowledge, no unusual conditions exist that would result in significant environmental, social, health, or safety impacts.

**Appendix A Project Maps**



**Legend:**

- Project Area
- Existing Transmission Line
- ▲ Existing Station

Data Sources: AEP, USGS 7.5' Topographic Quadrangles (Jersey and New Albany, Ohio)

Ohio State Plane North NAD 1983



July 02, 2024

**PROJECT LOCATION**



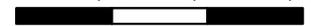
LICKING COUNTY, OHIO

**FIGURE 1  
TOPOGRAPHIC OVERVIEW**



Horizon 138 kV Transmission Line Extension Project

0 1,000 2,000 3,000



Feet



**Legend:**

- Proposed Transmission Line
- Existing Transmission Line
- Approximate Horizon Distribution Station Fence
- Parcel Boundary

Data Sources: AEP,  
Licking County Auditor, 2023

Ohio State Plane North  
NAD 1983



July 02, 2024

**PROJECT LOCATION**

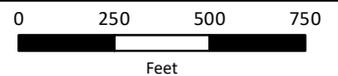


LICKING COUNTY, OHIO

**FIGURE 2  
PROJECT AERIAL MAP**



Horizon 138 kV  
Transmission Line  
Extension Project



## **Appendix B PJM Solution and Long-Term Forecast Report Pages**



# AEP Transmission Zone M-3 Process Horizon

**Need Number:** AEP-2022-OH045

**Process Stage:** Solutions Meeting 5/9/2023

**Previously Presented:** Need Meeting 06/15/2022

**Project Driver:** Customer Service

**Specific Assumption Reference:**

AEP Connection Requirements for the AEP Transmission System (AEP Assumptions Slide 12)

**Problem Statement:**

Customer Service:

- A customer has requested distribution service at a site North of AEP's existing Jug Street station in New Albany, OH. In addition, AEP Ohio has requested an additional delivery point from this location.
- The customer has indicated their initial load demand of 50 MW with an ultimate peak demand of 200 MW at the site.
- The customer has requested an ISD of 4/30/2024





## AEP Transmission Zone M-3 Process New Albany, OH

**Need Number:** AEP-2022-OH045

**Process Stage:** Solutions Meeting 5/9/2023

**Proposed Solution:**

**The following work is all direct connect substations to physically connect demand to the grid.**

- **Horizon 138 kV:** Construct a greenfield station with (8) 80 kA, 4000 A circuit breakers in breaker and half bus configuration. Construct ~ 0.05 miles of double circuit 138kV transmission line extending from the Jug St.- Green Chapel 138 kV circuit to Horizon station utilizing 2-bundled ACSR Falcon 1590 (54/19) conductor, SE rating 1118 MVA. Cost: **\$10.81 M**

PUCO Form FE-T9: Ohio Transmission Company  
Specifications of Planned Electric Transmission Lines

	<b>CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION</b>	Unable to energize Pumpkin Station
<b>13</b>	<b>MISCELLANEOUS:</b>	
<b>1</b>	<b>LINE NAME AND NUMBER:</b>	Horizon Extension 138 kV (DP22C0015)
<b>2</b>	<b>POINTS OF ORIGIN AND TERMINATION</b>	Green Chappel - Horizon & Badger - Horizon INTERMEDIATE STATIONS - N/A
<b>3</b>	<b>RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS</b>	~3.35 mi / 100ft / 2 circuit (~0.05 mi double circuit line work)
<b>4</b>	<b>VOLTAGE: DESIGN / OPERATE</b>	138 / 138 kV
<b>5</b>	<b>APPLICATION FOR CERTIFICATE:</b>	2024
<b>6</b>	<b>CONSTRUCTION:</b>	2024 - 2025
<b>7</b>	<b>CAPITAL INVESTMENT:</b>	\$2.12 M
<b>8</b>	<b>PLANNED SUBSTATION:</b>	Horizon
<b>9</b>	<b>SUPPORTING STRUCTURES:</b>	Steel
<b>10</b>	<b>PARTICIPATION WITH OTHER UTILITIES</b>	N/A
<b>11</b>	<b>PURPOSE OF THE PLANNED TRANSMISSION LINE</b>	Service to new customer
	<b>CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION</b>	Unable to serve new customer
<b>13</b>	<b>MISCELLANEOUS:</b>	
<b>1</b>	<b>LINE NAME AND NUMBER:</b>	Souder Extension 138 kV (DP22C0018)
<b>2</b>	<b>POINTS OF ORIGIN AND TERMINATION</b>	Corridor - Souder & Souder - Green Chapel INTERMEDIATE STATIONS - N/A

**Appendix C Agency Coordination**



In reply, refer to  
2022-LIC-56047

February 17, 2023

Mr. Ryan J. Weller  
Weller & Associates, Inc.  
1395 West Fifth Avenue  
Columbus, Ohio 43212

**RE: Jug Street Corridor 345kV Cut-In Project to Horizon Station, Jersey Township, Licking County, Ohio**

Dear Mr. Weller:

This letter is in response to the correspondence received February 15, 2023 regarding the proposed Jug Street Corridor 345kV Cut-In Project to Horizon Station, Jersey Township, Licking County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to the *Addendum: Cultural Resource Management Investigations for the 1.4 km (.85 mi) Jug Street Corridor 345kV Project to Horizon Station in Jersey Township, Licking County, Ohio* by Ryan J. Weller (Weller & Associates, Inc. 2023).

A literature review was completed as part of the investigations as the entirety of the project area was previously investigated. One (1) previously identified archaeological sites are located within the project area, Ohio Archaeological Inventory (OAI) #33LI2242. The site was recommended not eligible for listing in the National Register of Historic Places (NRHP). Our office agrees with this recommendation and no additional archeological investigation is needed. No architectural resources were identified in the Area of Potential Effects (APE).

Based on the information provided, we agree that the project as proposed will have no effect on historic properties. No further coordination with this office is necessary, unless the project changes or unless new or additional historic properties are discovered during implementation of this project. In such a situation, this office should be contacted. If you have any questions, please contact me at (614) 298-2022, or by e-mail at [khorrocks@ohiohistory.org](mailto:khorrocks@ohiohistory.org). Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink, appearing to read "Krista Horrocks".

Krista Horrocks, Project Reviews Manager  
Resource Protection and Review

RPR Serial No: 1096951

# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Ecological Services  
4625 Morse Road, Suite 104  
Columbus, Ohio 43230  
(614) 416-8993 / FAX (614) 416-8994



October 21, 2022

Project Code: 2023-0001075

Dear Mr. Holmes:

The U.S Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: The endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees  $\geq 3$  inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves, rock crevices and abandoned mines.

Seasonal Tree Clearing for Federally Listed Bat Species: Should the proposed project site contain trees  $\geq 3$  inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees  $\geq 3$  inches dbh cannot be avoided, we recommend removal of any trees  $\geq 3$  inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see <https://ecos.fws.gov/ecp/species/9045>), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence survey may be conducted for Indiana bats. If Indiana bats are not detected

during the survey, then tree clearing may occur at any time of the year. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio ([https://epa.ohio.gov/portals/47/facts/ohio\\_wetlands.pdf](https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf)). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at [mike.pettegrew@dnr.state.oh.us](mailto:mike.pettegrew@dnr.state.oh.us).

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or [ohio@fws.gov](mailto:ohio@fws.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrice Ashfield". The signature is fluid and cursive, with the first name "Patrice" written in a larger, more prominent script than the last name "Ashfield".

Patrice Ashfield  
Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW  
Eileen Wyza, ODNR-DOW



# Ohio Department of Natural Resources

MIKE DeWINE, GOVERNOR

MARY MERTZ, DIRECTOR

## Office of Real Estate

*John Kessler, Chief*  
2045 Morse Road – Bldg. E-2  
Columbus, OH 43229  
Phone: (614) 265-6621  
Fax: (614) 267-4764

November 15, 2022

Joshua Holmes  
AECOM  
Foster Plaza 6  
681 Anderson Drive, Suite 120  
Pittsburgh, Pennsylvania 15220, USA

**Re:** 22-1003; AEP Horizon Station Project

**Project:** The proposed project involves the construction of a new greenfield station (400-ft x 400-ft) on customer property that will utilize a shared sediment pond and access road associated with the customer site.

**Location:** The proposed project is located in Jersey Township, Licking County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

**Natural Heritage Database:** A review of the Ohio Natural Heritage Database indicates there are no records of state or federally listed plants or animals within one mile of the specified project area. Records searched date from 1980.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area.

**Fish and Wildlife:** The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The project is within the vicinity of records for the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However,

limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW (contact Eileen Wyza at [Eileen.Wyza@dnr.ohio.gov](mailto:Eileen.Wyza@dnr.ohio.gov)).

In addition, the entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these bat species predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. The DOW recommends tree cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH  $\geq 20$  if possible.

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "[RANGE-WIDE INDIANA BAT & NORTHERN LONG-EARED BAT SURVEY GUIDELINES](#)." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Eileen Wyza for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range the lake chubsucker (*Erimyzon sucetta*) a state threatened fish. The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

**Water Resources:** The Division of Water Resources has the following comment.

The [local floodplain administrator](#) should be contacted concerning the possible need for any floodplain permits or approvals for this project.

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew at [mike.pettegrew@dnr.ohio.gov](mailto:mike.pettegrew@dnr.ohio.gov) if you have questions about these comments or need additional information.

Mike Pettegrew  
Environmental Services Administrator

## Appendix D Ecological Report

# **JUG-CORRIDOR-HORIZON STATION PROJECT**

## **LICKING COUNTY, OHIO**

### **ECOLOGICAL REPORT**

*Prepared for:*

American Electric Power Ohio Transmission Company  
8600 Smiths Mill Road  
New Albany, Ohio 43054



*Prepared by:*

**AECOM**

525 Vine Street, Suite 1800  
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Project #: 60693887

April 2023

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## 1.0 INTRODUCTION

American Electric Power Ohio Transmission Company (AEP Ohio Transco) is proposing the installation of a new customer driven greenfield Horizon substation located on customer property within a 70.7-acre parcel in Licking County, Ohio. The purpose of the Project is to build a new greenfield station, approximately 400-ft x 400-ft, which will utilize a shared sediment pond and access road associated with the customer site. The Survey Area associated with this Report for the Project is located on Jersey, Ohio U.S. Geologic Survey 7.5' topographical quadrangle, as displayed on Project Overview Map (**Figure 1**).

Due to the active construction activities by others within the vicinity of the Project, an EMHT survey area overlaps with the AECOM Project Survey Area. During those investigations, EMHT identified a total of four wetlands (EMHT-Wetland P, EMHT-Wetland KK, EMHT-Wetland RR, and EMHT-Wetland QQ) that overlap with the AECOM Project Survey Area (**Figure 3**). These four EMHT wetlands were reviewed by USACE under file number LRH-2018-686-SCR (**Appendix F**). Additionally, within a Section 401 WQC application (DSW401196304) submitted by EMHT on April 17, 2019, three of the EMHT identified wetlands were proposed to be impacted (Attachment 2B of the EMHT Section 401 WQC provided as an excerpt within **Appendix F**), including EMHT-Wetland P, EMHT-Wetland RR and EMHT-Wetland QQ (**Figure 3**).

The purpose of the field survey was to assess the presence of wetlands and other “waters of the United States” (WOTUS) that occur along the proposed Project alignment. Secondly, land uses were also recorded to classify and characterize potential habitat for rare, threatened, and endangered species. This report will be used to assist AEP Ohio Transco’s efforts to identify potential WOTUS and rare, threatened, and endangered species habitat present along the proposed Project alignment to avoid or minimize impacts during construction activities.

## 2.0 METHODOLOGY

The field survey was conducted over a Project survey area of approximately 70.7-acres. Prior to conducting field surveys, digital U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey data, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) data, and U.S. Geological Survey (USGS) National Hydrography Dataset (NHD), FEMA 100-year floodplain data (FEMA), and USGS 7.5-minute topographic maps were reviewed as an exercise to identify the occurrence and location of potential wetland areas.

Field survey activities included recording the physical boundaries of observed water features using sub-meter capable EOS Arrow Global Positioning System (GPS) units in conjunction with ArcGIS Field Maps application on iPad tablets. The GPS data was imported into ArcMap Geographic Information System (GIS) software, where the data was reviewed, edited for accuracy, and compiled in a format suitable for transfer and use by AEP Ohio Transco. Water features were delineated and assessed based upon the appropriate

procedures detailed below. Land uses observed within the Project Survey Area were assigned a general classification based upon the principal land characteristics and vegetation cover of the location.

## 2.1 WETLAND DELINEATION

The Project Survey Area was evaluated according to the procedures outlined in the U.S. Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual (*1987 Manual*) (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) (MW Regional Supplement)* (USACE, 2010).

During field survey activities AECOM utilized the routine on-site delineation method described in the *1987 Manual* and *Regional Supplements* that consisted of a pedestrian site reconnaissance, including identifying the vegetation communities, soils identification, a geomorphologic assessment of hydrology, and notation of disturbance. If a wetland was identified, AECOM completed a USACE Wetland Determination Data form (USACE Data form) within each unique wetland habitat to serve as a representative of the wetland hydrology, vegetative community, and soil characteristics. Adjacent to each wetland complex, AECOM completed an additional USACE Data form as a representative of the upland community.

Additionally, USACE Data forms and representative photographs were also taken to represent upland communities where desktop review indicated the potential presence of an aquatic feature based on aerial imagery, two or less wetland criteria were observed, and/or an absence of an aquatic features was observed for areas mapped as an NWI and/or NHD feature.

### 2.1.1 WETLAND CLASSIFICATION

Wetlands identified in the field were classified based on the naming convention found in *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin *et al*, 1979). The unique wetland habitats were classified as palustrine emergent (PEM), palustrine forested (PFO), palustrine unconsolidated bottom (PUB), palustrine scrub-shrub (PSS), or other classifications for some wetlands, multiple Cowardin classifications may be present where more than one classification's vegetation is dominant (vegetation covers 30 percent or more of the substrate). Where multiple Cowardin classifications are present, the Cowardin classification of the plants that constitute the uppermost layer of vegetation having 30% or greater coverage is listed.

### 2.1.2 WETLAND ASSESSMENT

Each delineated wetland was assessed following the Ohio Environmental Protection Agency (OEPA) *Ohio Rapid Assessment Method for Wetlands v. 5.0* (ORAM) (Mack, 2001). Wetland assessments utilized the 10-page ORAM form, providing a final Category rating for each wetland.

## 2.2 STREAM ASSESSMENT

Streams were identified by the presence of a defined bed and bank, and evidence of an ordinary high-water mark (OHWM). The USACE defines OHWM as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (USACE, 2005).

### 2.2.1.1 OEPA QUALITATIVE HABITAT EVALUATION INDEX

The qualitative habitat evaluation index (QHEI) is designed to provide a rapid determination of habitat features that correspond to those physical factors that most affect fish communities and which are generally important to other aquatic life (e.g., macroinvertebrates). The quantitative measure of habitat used to calibrate the QHEI score are Indices (or Index) of Biotic Integrity (IBI) for fish. In most instances the QHEI is sufficient to give an indication of habitat quality, and the intensive quantitative analysis used to measure the IBI is not necessary. It is the IBI, rather than the QHEI, that is directly correlated with the aquatic life use designation for a particular surface water.

The QHEI method is generally considered appropriate for waterbodies with drainage basins greater than one square mile, if natural pools are greater than 40 cm, or if the water feature is shown as blue-line waterways on USGS 7.5-minute topographic quadrangle maps. In order to convey general stream habitat quality to the regulated public, the OEPA has assigned narrative ratings to QHEI scores. The ranges vary slightly for headwater streams (H are those with a watershed area less than or equal to 20 square miles) versus larger streams (L are those with a watershed area greater than 20 square miles). The Narrative Rating System includes: Very Poor (<30 H and L), Poor (30 to 42 H, 30 to 44 L), Fair (43 to 54 H, 45 to 59 L), Good (55 to 69 H, 60 to 74 L) and Excellent (70+ H, 75+ L).

### 2.2.2 OEPA PRIMARY HEADWATER HABITAT ASSESSMENT

Stream assessments were conducted using the methods described in the OEPA’s *Methods for Assessing Habitat in Flowing Waters: Using OEPA’s Qualitative Habitat Evaluation Index* (Rankin, 2006) and in the OEPA’s *Field Methods for Evaluating Primary Headwater Streams in Ohio* (OEPA, 2020). Streams associated with watershed area less than or equal to 1.0 mi<sup>2</sup> (259ha), and a maximum depth of water pools equal to or less than 15.75 inches were evaluated utilizing the HHEI methodology and all other streams assessed as QHEI. Flow regime (ephemeral, intermittent, perennial) was determined by the appropriate stream assessment score per OEPA manuals (OEPA, 2020) and by AECOM’s professional judgment.

Streams assessed in the Project survey area were reviewed for existing OEPA Aquatic Life Use Designations per OEPA’s Water Quality Standards (OAC Chapter 3745-1). Those without an existing use

designation were assigned a provisional aquatic life use designation based upon habitat assessment results (Rankin, 1989; OEPA 2020).

### 2.2.3 OEPA 401 WATER QUALITY CERTIFICATION FOR NATIONWIDE PERMIT ELIGIBILITY

The OEPA has designated each watershed in the state on the basis of whether it may be ineligible for coverage under Ohio EPA's 401 Water Quality Certification for Nationwide Permits. Mapping provided by OEPA illustrate the eligibility of streams in the area for a nationwide 401 permit. Three categories are identified: eligible, ineligible, and possibly eligible with additional field screening required. Impacts to streams within each watershed would then have eligibility for 401 Water Quality Certification determined by the watershed category. The three categories are defined as:

**Eligible:** Streams within the watershed are eligible for coverage under Ohio EPA's water quality certification for the nationwide permits if all other general and regional special terms and conditions are met.

**Ineligible:** Projects affecting high quality streams and undesignated streams draining directly to high quality streams, as represented in the map, must undergo an individual 401 Water Quality Certification review process.

**Possibly Eligible:** Additional field screening procedures are required for streams in the watershed to determine appropriate eligibility. Projects affecting undesignated streams within those HUC12 watersheds that do not directly but eventually drain into high quality waters, might be eligible for coverage under Ohio EPA's 401 Water Quality Certification for Nationwide Permits depending on the results of a field screening assessment. The procedures for determining individual stream eligibility in this scenario are specified in Appendix D "Stream Eligibility Determination Process" of the OEPA Ohio State Water Quality Certification of the 2017 Nationwide Permit Reauthorization.

### 2.2.4 UPLAND DRAINAGE FEATURES

An upland drainage feature (UDF) is a non-jurisdictional drainage that does not meet the criteria of either a jurisdictional stream or a wetland. A UDF generally lacks an OWHM (USACE, 2005), and are equivalent to a swale or an erosional feature as described by the USACE: "generally shallow features in the landscape that may convey water across upland areas during and following storm events. Swales usually occur on nearly flat slopes and typically have grass or other low-lying vegetation throughout the swale" (USACE, 2005).

A roadside ditch may also be documented as a UDF if it meets the "not potentially jurisdictional" characterization as described in the Office of Environmental Services *Roadway Ditch Characterization Flowchart* (Ohio Department of Transportation, 2014). This would include a ditch that originates entirely within the roadway right-of-way, has a seasonal flow regime, was not constructed to drain a wetland, and

does not have hydrophytic vegetation extending more than an insignificant amount beyond its original configuration.

In addition, UDF's (including swales, ditches, and other erosional features) are generally not "waters of the U.S." except in certain circumstances, such as relocated streams.

### 2.3 RARE, THREATENED, AND ENDANGERED SPECIES

AECOM conducted a rare, threatened, and endangered species review and general field habitat surveys within the Project survey area. AECOM submitted requests to Ohio Department of Natural Resources (ODNR) Office of Real Estate – Environmental Review Section and the United States Fish and Wildlife Service (USFWS) Ohio Ecological Services Field Office soliciting comments on the proposed Project. Responses were received in November and October 2022, respectively (**Appendix D**). Agency-identified species of concern and available species-specific information was reviewed to identify the various habitat types that listed species are known to inhabit.

AECOM field ecologists conducted a general habitat survey in conjunction with the stream and wetland field surveys as part of assessing potential impacts to rare, threatened, and endangered species. Land uses within the Project Survey Area were assigned a general classification based upon the principal land characteristics and vegetative cover as observed during the field surveys.

AECOM conducted a desktop assessment of the Project Survey Area and a quarter-mile buffer around it to identify potentially occurring winter bat hibernaculum that may be present near the Project included within the original request to the ODNR, which is included within **Appendix D**. This assessment was conducted by reviewing data on mining activity and karst geology from the ODNR Division of Mineral Resources and United States Geological Survey websites

## 3.0 RESULTS

On February 9, 2023, AECOM ecologists walked the Project Survey Area to conduct the wetland delineation, stream assessment and habitat survey. During field investigations, AECOM identified two stormwater/sediment ponds, documented that three previously delineated EMHT wetlands (EMHT Wetland P, EMHT Wetland RR, and EMHT Wetland QQ) had been impacted by others and no longer exist, and confirmed the boundary of EMHT wetland (EMHT Wetland KK). The delineated features are discussed in detail in the following sections.

**3.1 WETLAND DELINEATION**

**3.1.1 PRELIMINARY SOILS EVALUATION**

Soils in delineated wetlands were observed and documented as part of the delineation methodology. According to the USDA/NRCS Web Soil Survey, two soil series are mapped within the Project Survey Area (USDA NRCS 2021a and 2021b). Of these, one soil map unit is identified as hydric and the other soil map unit was identified as containing hydric inclusions within depressions and drainageways. **Table 1** below provides a detailed overview of all soil series and soil map units present within the Project Survey Area. Soil map units located in the Project Survey Area and vicinity are shown on **Figure 2**.

**TABLE 1 - SOIL MAP UNITS AND DESCRIPTIONS WITHIN THE PROJECT SURVEY AREA**

Soil Series	Map Unit Symbol	Map Unit Description	Topographic Setting	Hydric	Hydric Component (%)
Bennington	BeB	Bennington silt loam, 2 to 6 percent slopes	End moraines, ground moraines	Yes*	Condit 3% Pewamo, low carbonate till 3%
Pewamo	Pe	Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes	Drainageways, depressions	Yes	Pewamo, low carbonate till 85% Condit 6%

Yes\* = hydric inclusion

**3.1.2 NATIONAL WETLAND INVENTORY MAP REVIEW**

According to NWI data covering the Project location, the Project Survey Area contains five mapped NWI wetlands. The locations of NWI mapped wetlands in the Project vicinity are shown on **Figure 2**. A summary of NWI-mapped wetlands occurring in the Project Survey Area and their associated field identified resources is presented in **Table 2**.

**TABLE 2 - NWI DISPOSITION SUMMARY TABLE WITHIN THE PROJECT SURVEY AREA**

NWI Code	NWI Description	Related Field Inventoried Resource (Wetland ID/Stream ID)	Comments
PEM1A (3)	Palustrine, Emergent, Persistent, Temporary Flooded	N/A	NWI mapped wetland is no longer present due to recent disturbance.
PEM1C (1)	Palustrine, Emergent, Persistent, Seasonally Flooded	EMHT-Wetland QQ (Impacted)	NWI mapped wetland is no longer present due to recent disturbance.
PUBF (1)	Palustrine, Unconsolidated Bottom, Semi permanently flooded	N/A	NWI mapped wetland is no longer present due to recent disturbance.

### 3.1.3 DELINEATED WETLANDS

During field investigations, AECOM identified two stormwater/sediment ponds, documented that three previously delineated EMHT wetlands (EMHT-Wetland P, EMHT-Wetland RR, and EMHT-Wetland QQ) had been impacted by others and no longer exist, and confirmed the boundary of one previously delineated EMHT wetland (EMHT-Wetland KK). Final jurisdictional status of the EMHT delineated features was determined by the USACE under file number LRH-2018-686-SCR (copy provided in **Appendix F**). The location and approximate extent of the wetland identified within the Project Survey Area is shown on **Figure 3**. The EMHT impacted wetlands were determined not present, therefore they are not discussed in subsequent sections. Details for the confirmed wetland in the Project Survey Area is provided in **Table 3**. EMHT completed USACE and OEPA ORAM data forms, as well as photographs of the wetland, are provided in **Appendix A**.

**TABLE 3 – SUMMARY OF DELINEATED WETLANDS WITHIN PROJECT SURVEY AREA**

Wetland ID	Location		Isolated?	Habitat Type	Delineated Area (acre)	ORAM <sup>1</sup>		Nearest Structure # (Existing / Proposed)	Existing Structure # in Wetland	Proposed Structure # in Wetland	Structure Installation Method	Proposed Impacts	
	Latitude	Longitude				Score	Category					Temporary Matting Area (acre)	Permanent Impact Area (acre)
EMHT - Wetland KK	40.10596	-87.74829	Yes	PEM	0.043	27	1	N/A	N/A	N/A	N/A	TBD	TBD
P-HLA-002	40.098403	-82.749656	*	*	0.11	-	-	N/A	N/A	N/A	N/A	N/A	N/A
P-HLA-003	40.101479	-82.748588	*	*	0.31	-	-	N/A	N/A	N/A	N/A	N/A	N/A
<b>Total:</b>					<b>0.463</b>								

<sup>1</sup>= As assessed by EMHT. A copy of the OEPA ORAM form is provided in Appendix A.

\* Feature is a manmade stormwater retention pond and not eligible for scoring under ORAM

**3.2 STREAM DELINEATION**

No streams were delineated within the Project Survey Area.

**3.2.1 OEPA STREAM ELIGIBILITY**

OEPA stream eligibility for 401 Water Quality Certification mapping was reviewed for all of the delineated streams. The Project occurs across one watershed, designated by 401 WQC eligibility, as listed in Table 5. This watershed is listed as “possibly eligible”. OEPA stream eligibility mapping for the Project vicinity, is provided on **Figure 4**.

**3.3 FEMA 100 YEAR FLOODPLAINS**

Mapped FEMA designated 100-year floodplains and floodways are displayed on **Figure 2** and no regulated FEMA 100-year floodplains and/or floodways are located within the Project area.

**TABLE 4- SUMMARY OF WATERSHED 401 WQC ELIGIBILITY WITHIN THE PROJECT SURVEY AREA**

HUC-12	Watershed	401 WQC Eligibility	Number of Stream Assessments
050600011503	Headwaters Blacklick Creek	Possibly Eligible	0
<b>Total</b>			<b>0</b>

**3.4 PONDS**

Two ponds (P-HLA-002 and P-HLA-003) were observed within the Project Survey Area and verified as manmade stormwater/sediment ponds associated with construction of the adjacent industrial developments (**Figure 3**). Photographs of the delineated ponds are provided in **Appendix B**.

**3.5 VEGETATIVE COMMUNITIES WITHIN THE PROJECT SURVEY AREA**

AECOM ecologists conducted a general habitat survey in conjunction with the stream and wetland field surveys. A variety of woody and herbaceous lands, as described in **Table 5**, below, are present within the Project Survey Area, including urban, woodlands, and stream/wetland areas. Habitat descriptions applicable to the Project are provided below. Vegetative communities are depicted visually on aerial photography in **Figure 5**.

**TABLE 5- VEGETATIVE COMMUNITIES WITHIN THE PROJECT SURVEY AREA**

<b>Vegetative Community</b>	<b>Description</b>	<b>Approximate Acreage Within the Project Survey Area</b>	<b>Approximate Percentage Within the Project Survey Area</b>
Streams/Wetlands/Ponds	Streams and wetlands were observed both within and beyond the survey area for the Project.	0.4	0.6%
Urban	Urban areas are areas developed with residential and commercial land uses, including roads, buildings and parking lots. These areas are generally devoid of significant woody and herbaceous vegetation.	69.7	98.6%
Woodlands (Successional mixed hardwood forest)	Woodlands (floodplain, upland, successional-mixed, etc.) are present along the Project survey area. Woody species dominating these areas included Pin Oak, Reed Canary Grass, and Dark-Green Bulrush.	0.6	0.8%
<b>Totals:</b>		<b>70.7</b>	<b>100%</b>

**3.6 RARE, THREATENED AND ENDANGERED SPECIES AGENCY COORDINATION**

***Protected Species Agency Consultation –***

On October 11, 2022, coordination letters were sent to United States Fish and Wildlife Service (USFWS) and the Ohio Department of Natural Resources (ODNR) Ohio Natural Heritage Program (ONHP) and Division of Wildlife (DOW), seeking an environmental review for the Project for potential impacts to threatened and endangered species.

Responses were received from the USFWS on October 21, 2022, and from the ODNR on November 15, 2022. According to a response letter received from the USFWS, one federal endangered and one federal threatened bat species was identified within range of the Project area. Regarding state threatened and endangered species that may occur within the Project vicinity, six species were listed by the ODNR. Since the original coordination with the USFWS/ODNR, the USFWS has reclassified the northern long eared bat as from federally threatened to federally endangered listed species under 50 CFR Part 17 effective on March 31, 2023. The update to the species status is reflected within the table and report, which may differ from the previous coordination with USFWS/ODNR.

Correspondence letters from the USFWS and ODNR for Horizon Station Construction Project are included as **Appendix D**. **Table 7** provides a list of species of concern identified by the agencies as potentially occurring within the vicinity of the Project. Photographs of the habitat within the Project area are provided as **Appendix C**.

**TABLE 6  
ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY AREA**

Common Name (Scientific Name)	State Status	Federal Status	Typical Habitat	Habitat Observed in the Project Survey Area	Avoidance Dates	Agency Comments	Potential Impacts
<b>Mammals</b>							
Indiana Bat ( <i>Myotis sodalis</i> )	Endangered	Endangered	<p><u>Summer habitat</u> During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves.</p> <p><u>Hibernaculum(a)</u> During winter, these species hibernate in humid mines, caves, and occasionally man-made structures.</p>	<p><u>Summer habitat</u> <b>Yes</b> - Within the Project survey area, areas of young successional forest were identified which appear to be potentially suitable summer roosting and foraging habitat.</p> <p><u>Hibernaculum(a)</u> <b>No</b> – No Mines openings and/or known caves are located within 0.25 miles of Project area and USFWS did not identify known hibernacula within 5-miles of the Project. Furthermore, field evaluations did not identify any potential hibernaculum(a) within the Project area.</p>	<p><u>Summer Tree Clearing</u> April 1 – September 30</p>	<p><u>Summer habitat</u> If suitable habitat occurs within the Project survey Area, the USFWS and ODNR DOW recommends seasonal tree cutting (October 1 and March 31). If summer tree clearing is required, additional coordination with the ODNR/USFWS is warranted.</p> <p><u>Hibernaculum(a)</u> In accordance with 2022 Ohio ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing (2022 Joint Guidance) (copy of guidance provided within Appendix D), a 0.25-mile tree cutting and subsurface disturbance buffer around hibernaculum entrance is recommended</p>	<p><u>Summer habitat</u> Potential summer roosting habitat is present within the Project area and seasonal tree clearing, between October 1 and March 31, is recommended.</p>
Northern Long-eared Bat ( <i>Myotis septentrionalis</i> )	Endangered	Threatened*	<p><u>Summer habitat</u> During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves.</p> <p><u>Hibernaculum(a)</u> During winter, these species hibernate in humid mines, caves, and occasionally man-made structures.</p>	<p><u>Summer habitat</u> <b>Yes</b> - Within the Project survey area, areas of young successional forest were identified which appear to be potentially suitable summer roosting and foraging habitat.</p> <p><u>Hibernaculum(a)</u> <b>No</b> – No Mines openings and/or known caves are located within 0.25 miles of Project area and USFWS did not identify known hibernacula within 5-miles of the Project. Furthermore, field evaluations did not identify any potential hibernaculum(a) within the Project area.</p>	<p><u>Summer Tree Clearing</u> April 1 – September 30</p>	<p><u>Summer habitat</u> If suitable habitat occurs within the Project survey Area, the USFWS and ODNR DOW recommends seasonal tree cutting (October 1 and March 31). If summer tree clearing is required, additional coordination with the ODNR/USFWS is warranted.</p> <p><u>Hibernaculum(a)</u> In accordance with 2022 Ohio ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing (2022 Joint Guidance) (copy of guidance provided within Appendix D), a 0.25-mile tree cutting and subsurface disturbance buffer around hibernaculum entrance is recommended</p>	<p><u>Summer habitat</u> Potential summer roosting habitat is present within the Project area and seasonal tree clearing, between October 1 and March 31, is recommended.</p>
Little brown bat ( <i>Myotis lucifugus</i> )	Endangered	NA	<p><u>Summer habitat</u> During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves.</p> <p><u>Hibernaculum(a)</u> During winter, these species hibernates in humid mines, caves, and occasionally man-made structures.</p>	<p><u>Summer habitat</u> <b>Yes</b> - Within the Project survey area, areas of young successional forest were identified which appear to be potentially suitable summer roosting and foraging habitat.</p> <p><u>Hibernaculum(a)</u> <b>No</b> – No Mines openings and/or known caves are located within 0.25 miles of Project area Furthermore, field evaluations did not identify any potential hibernaculum(a) within the Project area.</p>	<p><u>Summer Tree Clearing</u> April 1 – September 30</p>	<p><u>Summer habitat</u> If suitable habitat occurs within the Project survey Area, the USFWS and ODNR DOW recommends seasonal tree cutting (October 1 and March 31). If summer tree clearing is required, additional coordination with the ODNR/USFWS is warranted.</p> <p><u>Hibernaculum(a)</u> In accordance with 2022 Ohio ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing (2022 Joint Guidance) (copy of guidance provided within Appendix D), a 0.25-mile tree cutting and subsurface disturbance buffer around hibernaculum entrance is recommended.</p>	<p><u>Summer habitat</u> Potential summer roosting habitat is present within the Project area and seasonal tree clearing, between October 1 and March 31, is recommended.</p>

**TABLE 6  
ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY AREA**

Common Name (Scientific Name)	State Status	Federal Status	Typical Habitat	Habitat Observed in the Project Survey Area	Avoidance Dates	Agency Comments	Potential Impacts
Tricolored bat ( <i>Perimyotis subflavus</i> )	Endangered	NA	<p><u>Summer habitat</u> During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves.</p> <p><u>Hibernaculum(a)</u> During winter, these species hibernates in humid mines, caves, and occasionally man-made structures.</p>	<p><u>Summer habitat</u> <b>Yes</b> - Within the Project survey area, areas of young successional forest were identified which appear to be potentially suitable summer roosting and foraging habitat.</p> <p><u>Hibernaculum(a)</u> <b>No</b> – No Mines openings and/or known caves are located within 0.25 miles of Project area. Furthermore, field evaluations did not identify any potential hibernaculum(a) within the Project area.</p>	<p><u>Summer Tree Clearing</u> April 1 – September 30</p>	<p><u>Summer habitat</u> If suitable habitat occurs within the Project survey Area, the USFWS and ODNR DOW recommends seasonal tree cutting (October 1 and March 31). If summer tree clearing is required, additional coordination with the ODNR/USFWS is warranted.</p> <p><u>Hibernaculum(a)</u> In accordance with 2022 Ohio ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing (2022 Joint Guidance) (copy of guidance provided within Appendix D), a 0.25-mile tree cutting and subsurface disturbance buffer around hibernaculum entrance is recommended.</p>	<p><u>Summer habitat</u> Potential summer roosting habitat is present within the Project area and seasonal tree clearing, between October 1 and March 31, is recommended.</p>
<b>Fish</b>							
Lake chubsucker ( <i>Erimyzon sucetta</i> )	Threatened	None	This species is found mainly in lakes, ponds, swamps, and streams.	<b>No</b> – no lakes, ponds, swamps or streams were identified in the Project survey area.	<u>In-Water Work</u> March 15 – June 30	The DOW recommends no in water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.	No
<b>Birds</b>							
Northern harrier ( <i>Circus hudsonius</i> )	Endangered	None	This species hunts over grasslands and nests can be found in large marshes and grasslands of 2-acres or greater in size.	<b>No</b> – Based on field reviews, the Project area is dominated by urban land.	April 15 to July 31	Habitat should be avoided during the bird's nesting period between April 15 through July 31. If habitat will not be impacted, this Project will not likely impact species.	No

\*= Effective March 31, 2023, reclassification to Endangered.

**Protected Species Agency Summary –**

Based on general observations during the ecological survey, forested clearing is anticipated to be limited due to the active construction by others within the Project area. If tree clearing is required, the ODNR/USFWS recommends implementations of seasonal tree clearing between October 1 and March 31 to avoid adverse effects to Indiana bat, northern long-eared bat, little brown bat, and tricolored bat. If trees must be cut during the summer months, the ODNR recommends that a mist net survey could be completed for Indiana bat, little brown bat, and the tricolored bat between June 1 and August 15. However, additional summer surveys would not constitute presence/absence within the Project area for the northern long-eared bat. If summer tree clearing is needed, additional coordination will be completed with ODNR/USFWS.

AECOM completed a desktop review for potential hibernaculum in accordance with the 2022 Ohio ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing (2022 Joint Guidance; Attachment D) within 0.25 miles of the Project area and no caves, mines, and/or karst features were identified. As per ODNR/USFWS guidance, further coordination regarding potential hibernaculum is only necessary if the habitat assessment find potential habitat within 0.25 miles of the Project area. Therefore, no further coordination was necessary with either the ODNR and/or USFWS regarding the listed bat species. Results of the desktop habitat assessment has been included within **Appendix E**.

No impacts are anticipated to any fish species as no in-water work is proposed as part of the Project. Additionally, no potential nesting habitat for the northern harrier was identified, as the Project area is nearly entirely urban land and does not contain open grasslands. Therefore, no further coordination regarding the listed bird species was warranted regarding this Project.

**4.0 SUMMARY**

The ecological survey of the Project Survey Area identified two stormwater/sediment ponds, confirmed three previously delineated EMHT wetlands (EMHT-Wetland P, EMHT-Wetland RR, and EMHT-Wetland QQ) had been impacted and no long exist within he Project survey area , and confirmed the boundaries of one previously delineated EMHT wetland (EMHT-Wetland KK). Final jurisdictional status for the EMHT delineated wetlands was determined by the USACE under file number LRH-2018-686-SCR (**Appendix F**).

Six state and/or federal listed threatened or endangered species were reported by the ODNR and none were listed by the USFWS as possibly occurring within the Project vicinity. The species listed by the ODNR included four mammals: Indiana bat, northern long-eared bat, little brown bat, and tricolored bat, one fish; lake chubsucker, and one birds: northern harrier. Based on adherence to seasonal restrictions for tree clearing (October 1<sup>st</sup> to March 31), avoidance of in-stream work, and absences of species habitats, the Project is not likely to impact these species.

The reported results of the ecological survey conducted by AECOM on this Project are limited to the areas within the Project Survey Area provided in **Figure 3**. Areas that fall outside of the Project Survey Area were not evaluated in the field and are not included in the reporting of this survey.

The information contained in this wetland delineation report is for a study corridor that may be much larger than the actual Project limits-of-disturbance; therefore, lengths and acreages listed in this report may not constitute the actual impacts of the Project defined in subsequent permit applications. If necessary, a separate report that identifies the actual Project impacts will be provided with agency submittals.

The field survey results presented herein apply to the existing and reasonably foreseeable site conditions at the time of our assessment. They cannot apply to site changes of which AECOM is unaware and has not had the opportunity to review. Changes in the condition of a property may occur with time due to natural processes or human impacts at the project site or on adjacent properties. Changes in applicable standards may also occur as a result of legislation or the expansion of knowledge over time. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond the control of AECOM.

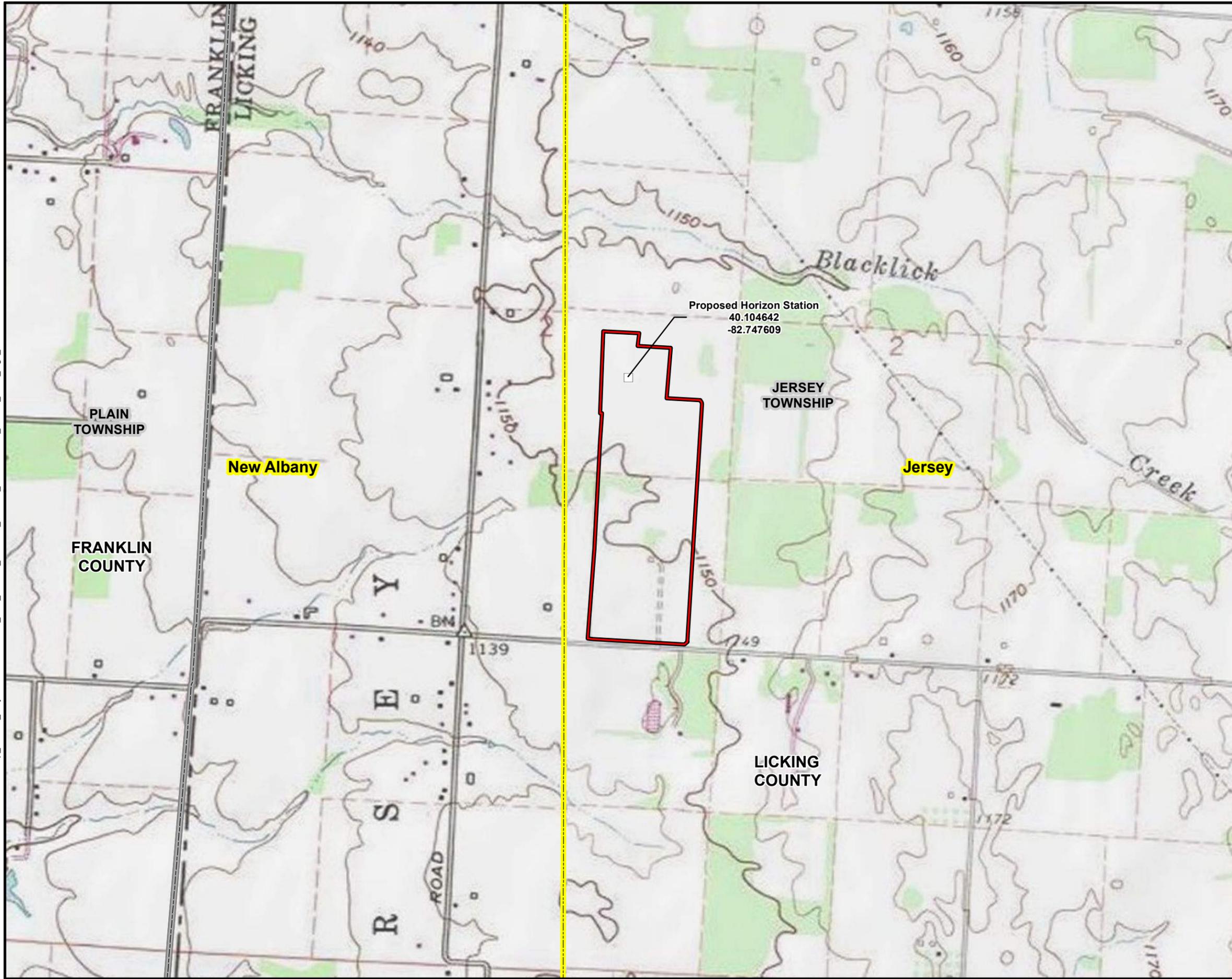
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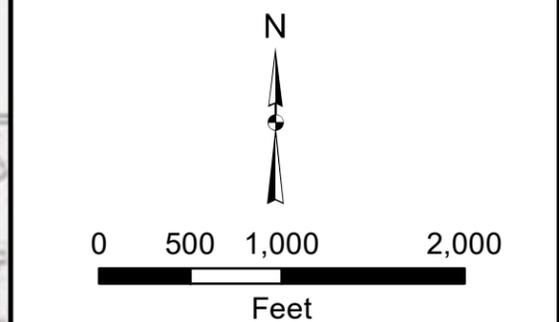
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### Legend

- Proposed Station
- ▭ Project Survey Area
- ▭ Ohio USGS 7.5' Topographic Quadrangle
- ▭ Township Boundary
- ▭ County Boundary



**AEP** Jug-Corridor  
Horizon Station  
Project

<b>FIGURE 1</b> PROJECT OVERVIEW	
DATE: 3/30/2023	1 INCH = 1,000 FEET
CREATED BY: CJT	CHECKED BY: BJM
JOB NO.: 60693887	<b>AECOM</b>





### Legend

- Station
- Contour (5-Ft)
- EMHT Delineated Stream
- NHD Stream (USGS)
- AECOM Delineated Ponds
- EMHT Delineated Pond
- EMHT Delineated Wetland
- EMHT Delineated Impacted Wetland
- Project Survey Area
- EMHT Project Survey Area
- Township Boundary
- Couny Boundary

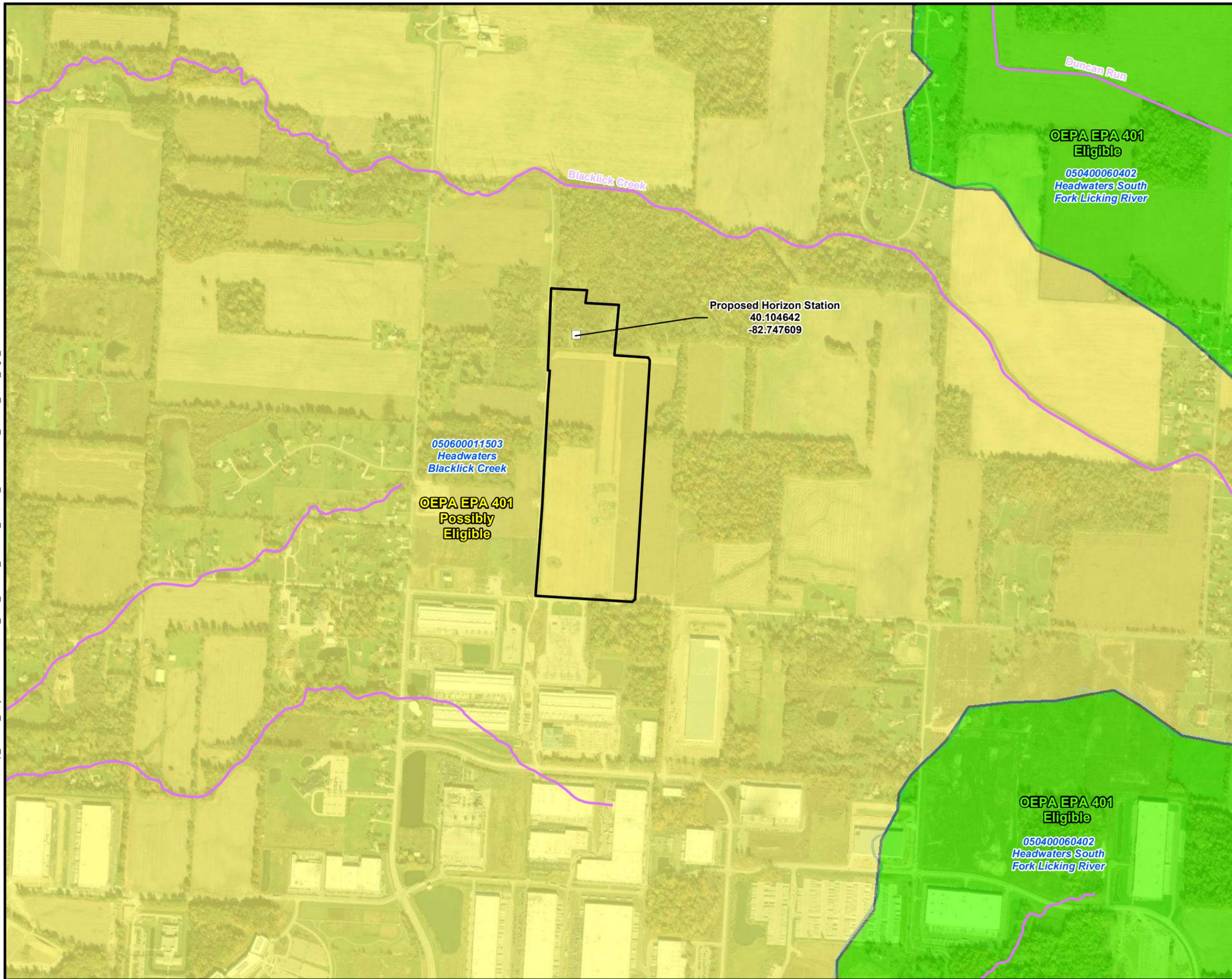
0 125 250 500  
Feet

Jug-Corridor-Horizon Station Project

**FIGURE 3**  
**WETLAND DELINEATION AND**  
**STREAM ASSESSMENT MAP**

DATE: 3/30/2023	1 INCH = 350 FEET
CREATED BY: CJT	CHECKED BY: BJM
JOB NO.: 60693887	<b>AECOM</b>

Date Saved: 3/30/2023  
Document Path: Z:\Cincinnati\USCNC02\DCS\GIS\ArcMap\_GeoDB\_Projects\EN\60693887\_AEP\_Horizon\_Station2\_MXD\Station2\_WDR\Horizon\_Station\_WDR\_Fig4\_20230223.mxd

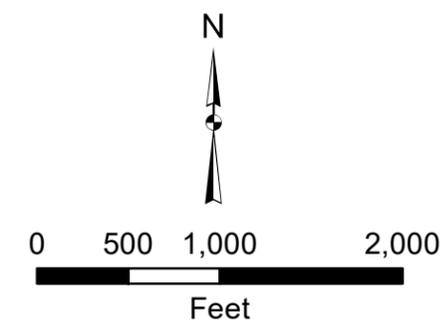


### Legend

- Station
- NHD Stream (USGS)
- ▭ HUC 12 (USGS)
- ▭ Project Survey Area

### OEPA Eligibility:

- ▭ Eligible
- ▭ Possibly Eligible



**AEP** Jug-Corridor-Horizon Station Project

FIGURE 4  
STREAM ELIGIBILITY MAP

DATE: 3/30/2023	1 INCH = 1,000 FEET
CREATED BY: CJT	CHECKED BY: BJM
JOB NO.: 60693887	<b>AECOM</b>

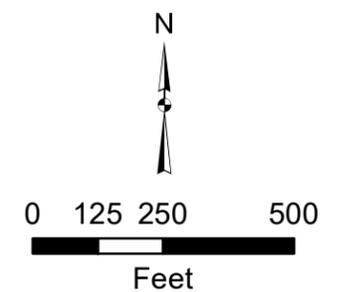


**Legend**

- Photo Location
- Proposed Station

**Type**

- Streams/Wetlands
- Urban
- Woodlands
- Project Survey Area



**AEP** Jug-Corridor  
Horizon Station  
Project

**FIGURE 5**  
VEGETATION COMMUNITIES MAP

DATE: 3/30/2023	1 INCH = 350 FEET
CREATED BY: CJT	CHECKED BY: BJM
JOB NO.: 60693887	<b>AECOM</b>

**APPENDIX A**  
**EMHT USACE WETLAND DETERMINATION DATA FORM,**  
**EMHT OEPA WETLAND ORAM FORM**  
**AND**  
**AECOM FEATURE PHOTOGRAPHS FOR EMHT-WETLAND KK**

**WETLAND DETERMINATION DATA FORM – Midwest Region**

Project/Site: Jug Street Wetland KK City/County: Licking Sampling Date: 6-13-2018  
 Applicant/Owner: MBJ Holdings LLC State: Ohio Sampling Point: WL-KK  
 Investigator(s): Stephen Bailey Section, Township, Range: T2N R15W  
 Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): Concave  
 Slope (%): 2-6 Lat: 40.10596 Long: -82.74830 Datum: WGS84  
 Soil Map Unit Name: Bennington silt loam (BeB) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____
Remarks:	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Quercus palustris</u>	<u>45</u>	<u>Y</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>45</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____
4. _____	_____	_____	_____	FAC species _____ x 3 = _____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Scirpus atrovirens</u>	<u>40</u>	<u>Y</u>	<u>OBL</u>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Carex frankii</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. <u>Phalaris arundinacea</u>	<u>55</u>	<u>Y</u>	<u>FACW</u>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. _____	_____	_____	_____	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
<u>100</u> = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present?
1. _____	_____	_____	_____	Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

**SOIL**

Sampling Point: WL-KK

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 4/2	95	10YR 5/8	5	C	M		
7-12	10YR 4/1	90	10YR 5/8	10	C	M		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators:</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)
---	---	---

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**  
 Type: \_\_\_\_\_  
 Depth (Inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one is required; check all that apply)</b> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> FAC-Neutral Test (D5)
--	---	--

**Field Observations:**

Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>2"</u>	<b>Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></b>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>Surface</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM – Midwest Region**

Project/Site: Jug Street Upland KK City/County: Licking Sampling Date: 6-13-2018  
 Applicant/Owner: MBJ Holdings LLC State: Ohio Sampling Point: UL-KK  
 Investigator(s): Stephen Bailey Section, Township, Range: T2N R15W  
 Landform (hillslope, terrace, etc.): Plain Local relief (concave, convex, none): None  
 Slope (%): 2-6 Lat: 40.10575 Long: -82.74809 Datum: WGS84  
 Soil Map Unit Name: Bennington silt loam (BeB) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Quercus palustris</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>14</u> (A/B)
2. <u>Crataegus sp.</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	
3. _____				
4. _____				
5. _____				
<u>25</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15</u> )				
1. <u>Elaeagnus umbellata</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Rosa multiflora</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	
3. _____				
4. _____				
5. _____				
<u>25</u> = Total Cover				
Herb Stratum (Plot size: <u>5</u> )				
1. <u>Elaeagnus umbellata</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Bellis perennis</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Trifolium repens</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	
4. <u>Dactylis glomerata</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	
5. <u>Carex sp.</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
6. <u>Rubus sp.</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	
7. <u>Agrimonia parviflora</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
8. <u>Solidago canadensis</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	
9. _____				
10. _____				
<u>100</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>15</u> )				
1. _____				<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
2. _____				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

**SOIL**

Sampling Point: UL-KK

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 4/4	100						
4-6	10YR 4/3	100						
7-12	10YR 4/2	98	10YR 5/8	2	C	M		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<p><b>Hydric Soil Indicators:</b></p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <p><input type="checkbox"/> Coast Prairie Redox (A16)</p> <p><input type="checkbox"/> Dark Surface (S7)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
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<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (Inches): \_\_\_\_\_

**Hydric Soil Present? Yes  No**

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

<p><b>Field Observations:</b></p> <p>Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p><b>Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></b></p>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**None observed.**

## Background Information

<b>Name:</b> Taylor Gleaves	
<b>Date:</b> 6-26-2018	
<b>Affiliation:</b> EMH&T	
<b>Address:</b> 5500 New Albany Road Columbus, OH 43054	
<b>Phone Number:</b> 6147754519	
<b>e-mail address:</b> tgleaves@emht.com	
<b>Name of Wetland:</b> Wetland KK	
<b>Vegetation Communit(ies):</b> Emergent	
<b>HGM Class(es):</b> Depressional	
<b>Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.</b> See exhibit 6.	
<b>Lat/Long or UTM Coordinate</b>	40.10596/-82.74830
<b>USGS Quad Name</b>	Jersey
<b>County</b>	Licking
<b>Township</b>	T2N R15W
<b>Section and Subsection</b>	
<b>Hydrologic Unit Code</b>	050600011503
<b>Site Visit</b>	6-13-2018
<b>National Wetland Inventory Map</b>	N/A
<b>Ohio Wetland Inventory Map</b>	N/A
<b>Soil Survey</b>	Bennington silt loam
<b>Delineation report/map</b>	See exhibit 6.

<b>Name of Wetland:</b> Wetland KK	
<b>Wetland Size (acres, hectares):</b>	.044
<b>Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.</b> See exhibit 6	
<b>Comments, Narrative Discussion, Justification of Category Changes:</b>	
<b>Final score :</b> 27	<b>Category:</b> 1

## Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the “scoring boundaries” of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the “jurisdictional boundaries.” For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland’s jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. *Areas with a high degree of hydrologic interaction should be scored as a single wetland.* In determining a wetland’s scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	X	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.		X
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	X	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.		X
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		X
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		X

**End of Scoring Boundary Determination. Begin Narrative Rating on next page.**

## Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <http://www.dnr.state.oh.us/dnap>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES  Wetland should be evaluated for possible Category 3 status  Go to Question 2	<input checked="" type="radio"/> NO  Go to Question 2
2	<b>Threatened or Endangered Species.</b> Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES  Wetland is a Category 3 wetland.  Go to Question 3	<input checked="" type="radio"/> NO  Go to Question 3
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES  Wetland is a Category 3 wetland  Go to Question 4	<input checked="" type="radio"/> NO  Go to Question 4
4	<b>Significant Breeding or Concentration Area.</b> Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES  Wetland is a Category 3 wetland  Go to Question 5	<input checked="" type="radio"/> NO  Go to Question 5
5	<b>Category 1 Wetlands.</b> Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES  Wetland is a Category 1 wetland  Go to Question 6	<input checked="" type="radio"/> NO  Go to Question 6
6	<b>Bogs.</b> Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES  Wetland is a Category 3 wetland  Go to Question 7	<input checked="" type="radio"/> NO  Go to Question 7
7	<b>Fens.</b> Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES  Wetland is a Category 3 wetland  Go to Question 8a	<input checked="" type="radio"/> NO  Go to Question 8a
8a	<b>"Old Growth Forest."</b> Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES  Wetland is a Category 3 wetland.  Go to Question 8b	<input checked="" type="radio"/> NO  Go to Question 8b

8b	<b>Mature forested wetlands.</b> Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES  Wetland should be evaluated for possible Category 3 status.  Go to Question 9a	<b>NO</b>  Go to Question 9a
9a	<b>Lake Erie coastal and tributary wetlands.</b> Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES  Go to Question 9b	<b>NO</b>  Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES  Wetland should be evaluated for possible Category 3 status  Go to Question 10	NO  Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES  Go to Question 9d	NO  Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES  Wetland is a Category 3 wetland  Go to Question 10	NO  Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES  Wetland should be evaluated for possible Category 3 status  Go to Question 10	NO  Go to Question 10
10	<b>Lake Plain Sand Prairies (Oak Openings)</b> Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES  Wetland is a Category 3 wetland.  Go to Question 11	<b>NO</b>  Go to Question 11
11	<b>Relict Wet Prairies.</b> Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES  Wetland should be evaluated for possible Category 3 status  Complete Quantitative Rating	<b>NO</b>  Complete Quantitative Rating

**Table 1. Characteristic plant species.**

<b>invasive/exotic spp</b>	<b>fen species</b>	<b>bog species</b>	<b>Oak Opening species</b>	<b>wet prairie species</b>
<i>Lythrum salicaria</i>	<i>Zygadenus elegans</i> var. <i>glaucus</i>	<i>Calla palustris</i>	<i>Carex cryptolepis</i>	<i>Calamagrostis canadensis</i>
<i>Myriophyllum spicatum</i>	<i>Cacalia plantaginea</i>	<i>Carex atlantica</i> var. <i>capillacea</i>	<i>Carex lasiocarpa</i>	<i>Calamagrostis stricta</i>
<i>Najas minor</i>	<i>Carex flava</i>	<i>Carex echinata</i>	<i>Carex stricta</i>	<i>Carex atherodes</i>
<i>Phalaris arundinacea</i>	<i>Carex sterilis</i>	<i>Carex oligosperma</i>	<i>Cladium mariscoides</i>	<i>Carex buxbaumii</i>
<i>Phragmites australis</i>	<i>Carex stricta</i>	<i>Carex trisperma</i>	<i>Calamagrostis stricta</i>	<i>Carex pellita</i>
<i>Potamogeton crispus</i>	<i>Deschampsia caespitosa</i>	<i>Chamaedaphne calyculata</i>	<i>Calamagrostis canadensis</i>	<i>Carex sartwellii</i>
<i>Ranunculus ficaria</i>	<i>Eleocharis rostellata</i>	<i>Decodon verticillatus</i>	<i>Quercus palustris</i>	<i>Gentiana andrewsii</i>
<i>Rhamnus frangula</i>	<i>Eriophorum viridicarinatum</i>	<i>Eriophorum virginicum</i>		<i>Helianthus grosseserratus</i>
<i>Typha angustifolia</i>	<i>Gentianopsis</i> spp.	<i>Larix laricina</i>		<i>Liatris spicata</i>
<i>Typha xglauca</i>	<i>Lobelia kalmii</i>	<i>Nemopanthus mucronatus</i>		<i>Lysimachia quadriflora</i>
	<i>Parnassia glauca</i>	<i>Scheuchzeria palustris</i>		<i>Lythrum alatum</i>
	<i>Potentilla fruticosa</i>	<i>Sphagnum</i> spp.		<i>Pycnanthemum virginianum</i>
	<i>Rhamnus alnifolia</i>	<i>Vaccinium macrocarpon</i>		<i>Silphium terebinthinaceum</i>
	<i>Rhynchospora capillacea</i>	<i>Vaccinium corymbosum</i>		<i>Sorghastrum nutans</i>
	<i>Salix candida</i>	<i>Vaccinium oxycoccos</i>		<i>Spartina pectinata</i>
	<i>Salix myricoides</i>	<i>Woodwardia virginica</i>		<i>Solidago riddellii</i>
	<i>Salix serissima</i>	<i>Xyris difformis</i>		
	<i>Solidago ohioensis</i>			
	<i>Tofieldia glutinosa</i>			
	<i>Triglochin maritimum</i>			
	<i>Triglochin palustre</i>			

**End of Narrative Rating. Begin Quantitative Rating on next page.**

<b>Site:</b> Jug Street Wetland KK	<b>Rater(s):</b> Stephen Bailey	<b>Date:</b> 6-13-2018
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<b>0</b>	<b>0</b>
max 6 pts.	subtotal

**Metric 1. Wetland Area (size).**

- Select one size class and assign score.
- >50 acres (>20.2ha) (6 pts)
  - 25 to <50 acres (10.1 to <20.2ha) (5 pts)
  - 10 to <25 acres (4 to <10.1ha) (4 pts)
  - 3 to <10 acres (1.2 to <4ha) (3 pts)
  - 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
  - 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
  - <0.1 acres (0.04ha) (0 pts)

<b>7</b>	<b>7</b>
max 14 pts.	subtotal

**Metric 2. Upland buffers and surrounding land use.**

- 2a. Calculate average buffer width. Select only one and assign score. Do not double check.
- WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
  - MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
  - NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
  - VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)
- 2b. Intensity of surrounding land use. Select one or double check and average.
- VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
  - LOW. Old field (>10 years), shrub land, young second growth forest. (5)
  - MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
  - HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>11</b>	<b>18</b>
max 30 pts.	subtotal

**Metric 3. Hydrology.**

- 3a. Sources of Water. Score all that apply.
- High pH groundwater (5)
  - Other groundwater (3)
  - Precipitation (1)
  - Seasonal/Intermittent surface water (3)
  - Perennial surface water (lake or stream) (5)
- 3b. Connectivity. Score all that apply.
- 100 year floodplain (1)
  - Between stream/lake and other human use (1)
  - Part of wetland/upland (e.g. forest), complex (1)
  - Part of riparian or upland corridor (1)
- 3c. Maximum water depth. Select only one and assign score.
- >0.7 (27.6in) (3)
  - 0.4 to 0.7m (15.7 to 27.6in) (2)
  - <0.4m (<15.7in) (1)
- 3d. Duration inundation/saturation. Score one or dbl check.
- Semi- to permanently inundated/saturated (4)
  - Regularly inundated/saturated (3)
  - Seasonally inundated (2)
  - Seasonally saturated in upper 30cm (12in) (1)
- 3e. Modifications to natural hydrologic regime. Score one or double check and average.

<ul style="list-style-type: none"> <li><input type="checkbox"/> None or none apparent (12)</li> <li><input checked="" type="checkbox"/> Recovered (7)</li> <li><input type="checkbox"/> Recovering (3)</li> <li><input type="checkbox"/> Recent or no recovery (1)</li> </ul>	<p>Check all disturbances observed</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> ditch</li> <li><input type="checkbox"/> tile</li> <li><input type="checkbox"/> dike</li> <li><input type="checkbox"/> weir</li> <li><input type="checkbox"/> stormwater input</li> <li><input type="checkbox"/> point source (nonstormwater)</li> <li><input checked="" type="checkbox"/> filling/grading</li> <li><input type="checkbox"/> road bed/RR track</li> <li><input type="checkbox"/> dredging</li> <li><input type="checkbox"/> other _____</li> </ul>
---	--

<b>9</b>	<b>27</b>
max 20 pts.	subtotal

**Metric 4. Habitat Alteration and Development.**

- 4a. Substrate disturbance. Score one or double check and average.
- None or none apparent (4)
  - Recovered (3)
  - Recovering (2)
  - Recent or no recovery (1)
- 4b. Habitat development. Select only one and assign score.
- Excellent (7)
  - Very good (6)
  - Good (5)
  - Moderately good (4)
  - Fair (3)
  - Poor to fair (2)
  - Poor (1)
- 4c. Habitat alteration. Score one or double check and average.

<ul style="list-style-type: none"> <li><input type="checkbox"/> None or none apparent (9)</li> <li><input type="checkbox"/> Recovered (6)</li> <li><input checked="" type="checkbox"/> Recovering (3)</li> <li><input type="checkbox"/> Recent or no recovery (1)</li> </ul>	<p>Check all disturbances observed</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> mowing</li> <li><input checked="" type="checkbox"/> grazing</li> <li><input checked="" type="checkbox"/> clearcutting</li> <li><input type="checkbox"/> selective cutting</li> <li><input type="checkbox"/> woody debris removal</li> <li><input type="checkbox"/> toxic pollutants</li> <li><input type="checkbox"/> shrub/sapling removal</li> <li><input type="checkbox"/> herbaceous/aquatic bed removal</li> <li><input type="checkbox"/> sedimentation</li> <li><input type="checkbox"/> dredging</li> <li><input type="checkbox"/> farming</li> <li><input type="checkbox"/> nutrient enrichment</li> </ul>
--	--

<b>27</b>
subtotal this page

<b>Site:</b> Jug Street Wetland KK	<b>Rater(s):</b> Stephen Bailey	<b>Date:</b> 6-13-2018
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27

subtotal first page

0	27
max 10 pts	subtotal

### Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- Bog (10)
- Fen (10)
- Old growth forest (10)
- Mature forested wetland (5)
- Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- Lake Erie coastal/tributary wetland-restricted hydrology (5)
- Lake Plain Sand Prairies (Oak Openings) (10)
- Relict Wet Prairies (10)
- Known occurrence state/federal threatened or endangered species (10)
- Significant migratory songbird/water fowl habitat or usage (10)
- Category 1 Wetland. See Question 1 Qualitative Rating (-10)

0	27
max 20 pts	subtotal

### Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- Aquatic bed
- 1 Emergent
- Shrub
- Forest
- Mudflats
- Open water
- Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion. Select only one.

- High (5)
- Moderately high(4)
- Moderate (3)
- Moderately low (2)
- Low (1)
- None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- Extensive >75% cover (-5)
- Moderate 25-75% cover (-3)
- Sparse 5-25% cover (-1)
- Nearly absent <5% cover (0)
- Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- Vegetated hummocks/tussucks
- Coarse woody debris >15cm (6in)
- Standing dead >25cm (10in) dbh
- Amphibian breeding pools

#### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

#### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

#### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

#### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

27

Category 1

**End of Quantitative Rating. Complete Categorization Worksheets.**

## ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1. Critical Habitat	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES <input checked="" type="radio"/> NO	If yes, Category 1.
	Question 6. Bogs	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 7. Fens	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES <input checked="" type="radio"/> NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES <input checked="" type="radio"/> NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES <input checked="" type="radio"/> NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES <input checked="" type="radio"/> NO	If yes, evaluate for Category 3; may also be 1 or 2.
Question 10. Oak Openings	YES <input checked="" type="radio"/> NO	If yes, Category 3	
Question 11. Relict Wet Prairies	YES <input checked="" type="radio"/> NO	If yes, evaluate for Category 3; may also be 1 or 2.	
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use	7	
	Metric 3. Hydrology	11	
	Metric 4. Habitat	9	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersions, microtopography	0	
	<b>TOTAL SCORE</b>	<b>27</b>	<b>1</b>

**Complete Wetland Categorization Worksheet.**

## Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
<p>Did you answer "Yes" to any of the following questions:</p> <p>Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10</p>	<p>YES</p> <p>Wetland is categorized as a Category 3 wetland</p>	<p><input checked="" type="radio"/> NO</p>	<p>Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized by the ORAM</p>
<p>Did you answer "Yes" to any of the following questions:</p> <p>Narrative Rating Nos. 1, 8b, 9b, 9e, 11</p>	<p>YES</p> <p>Wetland should be evaluated for possible Category 3 status</p>	<p><input checked="" type="radio"/> NO</p>	<p>Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.</p>
<p>Did you answer "Yes" to</p> <p>Narrative Rating No. 5</p>	<p>YES</p> <p>Wetland is categorized as a Category 1 wetland</p>	<p><input checked="" type="radio"/> NO</p>	<p>Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (<i>including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM</p>
<p>Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?</p>	<p><input checked="" type="radio"/> YES</p> <p>Wetland is assigned to the appropriate category based on the scoring range</p>	<p><input type="radio"/> NO</p>	<p>If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.</p>
<p>Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?</p>	<p>YES</p> <p>Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria</p>	<p><input checked="" type="radio"/> NO</p>	<p>Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).</p>
<p>Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?</p>	<p>YES</p> <p>Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form</p>	<p><input checked="" type="radio"/> NO</p> <p>Wetland is assigned to category as determined by the ORAM.</p>	<p>A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.</p>

**Final Category**

Choose one    
 **Category 1**    
 Category 2    
 Category 3

**End of Ohio Rapid Assessment Method for Wetlands.**

<b>Client Name:</b> AEP	<b>Site Location:</b> Jug-Corridor-Horizon Station Project	<b>Project No.:</b> 60693887
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<b>Wetland KK</b>
<b>Date:</b> February 09, 2023
<b>Description:</b>  PEM  Facing North



<b>Wetland KK</b>
<b>Date:</b> February 09, 2023
<b>Description:</b>  PEM  Facing East



<b>Client Name:</b> AEP	<b>Site Location:</b> Jug-Corridor-Horizon Station Project	<b>Project No.:</b> 60693887
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<b>Wetland KK</b>
<b>Date:</b> February 09, 2023
<b>Description:</b>  PEM  Facing South



<b>Wetland KK</b>
<b>Date:</b> February 09, 2023
<b>Description:</b>  PEM  Facing West



**APPENDIX B**  
**POND PHOTOGRAPHIC RECORD**

<b>Client Name:</b> AEP	<b>Site Location:</b> Jug-Corridor-Horizon Station Project	<b>Project No.:</b> 60693887
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<b>P-HLA-002</b>
<b>Date:</b> February 09, 2023
<b>Description:</b> Man-Made Sediment Pond  Facing North



<b>P-HLA-002</b>
<b>Date:</b> February 09, 2023
<b>Description:</b> Man-Made Sediment Pond  Facing South



<b>Client Name:</b> AEP	<b>Site Location:</b> Jug-Corridor-Horizon Station Project	<b>Project No.:</b> 60693887
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<b>P-HLA-003</b>
<b>Date:</b> February 09, 2023
<b>Description:</b>  Man-Made Sediment Pond  Facing North



<b>P-HLA-003</b>
<b>Date:</b> February 09, 2023
<b>Description:</b>  Man-Made Sediment Pond  Facing Southeast



**APPENDIX C**  
**HABITAT PHOTOGRAPHIC RECORD**

<b>Client Name:</b> AEP	<b>Site Location:</b> Jug-Corridor-Horizon Station Project	<b>Project No.:</b> 60693887
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<b>PH-01</b>
<b>Date:</b> February 09, 2023
<b>Description:</b> Urban Facing North



<b>PH-02</b>
<b>Date:</b> February 09, 2023
<b>Description:</b> Woodlands Facing East



<b>Client Name:</b> AEP	<b>Site Location:</b> Jug-Corridor-Horizon Station Project	<b>Project No.:</b> 60693887
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<b>PH-03</b>
<b>Date:</b> February 09, 2023
<b>Description:</b> PEM Wetland Facing West



<b>PH-04</b>
<b>Date:</b> February 9, 2023
<b>Description:</b> Pond Facing North



**APPENDIX D**  
**AGENCY COORDINATION**



# Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR

MARY MERTZ, DIRECTOR

**Office of Real Estate**  
*John Kessler, Chief*  
2045 Morse Road – Bldg. E-2  
Columbus, OH 43229  
Phone: (614) 265-6621  
Fax: (614) 267-4764

November 15, 2022

Joshua Holmes  
AECOM  
Foster Plaza 6  
681 Anderson Drive, Suite 120  
Pittsburgh, Pennsylvania 15220, USA

**Re:** 22-1003; AEP Horizon Station Project

**Project:** The proposed project involves the construction of a new greenfield station (400-ft x 400-ft) on customer property that will utilize a shared sediment pond and access road associated with the customer site.

**Location:** The proposed project is located in Jersey Township, Licking County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

**Natural Heritage Database:** A review of the Ohio Natural Heritage Database indicates there are no records of state or federally listed plants or animals within one mile of the specified project area. Records searched date from 1980.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area.

**Fish and Wildlife:** The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The project is within the vicinity of records for the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However,

limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW (contact Eileen Wyza at [Eileen.Wyza@dnr.ohio.gov](mailto:Eileen.Wyza@dnr.ohio.gov)).

In addition, the entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these bat species predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. The DOW recommends tree cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH  $\geq 20$  if possible.

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "[RANGE-WIDE INDIANA BAT & NORTHERN LONG-EARED BAT SURVEY GUIDELINES](#)." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Eileen Wyza for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range the lake chubsucker (*Erimyzon sucetta*) a state threatened fish. The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

**Water Resources:** The Division of Water Resources has the following comment.

The [local floodplain administrator](#) should be contacted concerning the possible need for any floodplain permits or approvals for this project.

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew at [mike.pettegrew@dnr.ohio.gov](mailto:mike.pettegrew@dnr.ohio.gov) if you have questions about these comments or need additional information.

Mike Pettegrew  
Environmental Services Administrator

# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Ecological Services  
4625 Morse Road, Suite 104  
Columbus, Ohio 43230  
(614) 416-8993 / FAX (614) 416-8994



October 21, 2022

Project Code: 2023-0001075

Dear Mr. Holmes:

The U.S Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: The endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees  $\geq 3$  inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves, rock crevices and abandoned mines.

Seasonal Tree Clearing for Federally Listed Bat Species: Should the proposed project site contain trees  $\geq 3$  inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees  $\geq 3$  inches dbh cannot be avoided, we recommend removal of any trees  $\geq 3$  inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see <https://ecos.fws.gov/ecp/species/9045>), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence survey may be conducted for Indiana bats. If Indiana bats are not detected

during the survey, then tree clearing may occur at any time of the year. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio ([https://epa.ohio.gov/portals/47/facts/ohio\\_wetlands.pdf](https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf)). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at [mike.pettegrew@dnr.state.oh.us](mailto:mike.pettegrew@dnr.state.oh.us).

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or [ohio@fws.gov](mailto:ohio@fws.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrice Ashfield". The signature is fluid and cursive, with a large initial "P" and "A".

Patrice Ashfield  
Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW  
Eileen Wyza, ODNR-DOW



## OHIO DIVISION OF WILDLIFE AND U.S. FISH AND WILDLIFE SERVICE (OH-FIELD OFFICE) JOINT GUIDANCE FOR BAT SURVEYS AND TREE CLEARING MAY 2022

This document has been updated with new state guidance for the 2022 field season.

*This guidance applies to state recommendations only. Contact the USFWS to determine if federal consultation is also necessary to comply with federal law.*

### **Agency Contacts:**

**ODNR-DOW Permit Coordinator:** Wildlife.Permits@dnr.ohio.gov, (614) 265-6315

**ODNR-DOW Bat Survey Coordinator:** Eileen Wyza, Eileen.Wyza@dnr.ohio.gov, (614) 265-6764

**USFWS OHFO Endangered Species:** Angela Boyer, angela\_boyer@fws.gov, (614) 416-8993, ext.122

### **Covid-19 Guidance:**

Surveyors should follow all covid protocols put in place by their agency. All surveyors should wear masks when handling bats and anyone exhibiting symptoms of covid-19 should not participate in bat surveys.

### **Ohio Mist-net Surveys:**

This document serves as guidance for bat mist netting activities in Ohio and does not supersede any requirements listed on your permits or facility certificate. All permit conditions must be strictly adhered to for permits to be valid and for renewal of permits beyond the existing year.

Due to the presence of White-nose Syndrome (WNS), mist-netting in Ohio must be conducted between June 1 and August 15 unless stated otherwise in your state permit. The ODNR Division of Wildlife (ODNR-DOW) and U.S. Fish and Wildlife Service (USFWS) Ohio Field Office (OHFO) have determined that delaying netting activities until June 1 will provide additional recovery time for bats affected by WNS. For presence/probable absence surveys, netting will not be accepted outside of the June 1 - August 15 timeframe.

To assess project areas for presence or probable absence of the state and federally listed Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) during summer residency, the USFWS developed the USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines (March 2022). This protocol, **with minor modifications referenced below**, can also be used in Ohio for the 2022 field season and includes surveying for the state-listed little brown bat (*Myotis lucifugus*) and tricolored bat (*Perimyotis subflavus*).

According to the updated federal range-wide guidelines, presence/probable absence net surveys for northern long-eared bats shall incorporate either 16 net nights per square 0.5 kilometer (123 acres) of project area, or four net nights per kilometer for linear projects. Presence/probable absence net surveys for Indiana bats shall incorporate nine net nights per square 0.5 kilometer (123 acres) of project area, or two net nights per kilometer for linear

projects. If a project area is eligible for a presence/probable absence survey for both Indiana bats and northern long-eared bats, following the northern long-eared bat level of effort will qualify as a presence/ probable absence survey for both species. However, if a project area is eligible for a presence/absence survey for both species, following the Indiana bat level of effort will not qualify the survey for a northern long-eared bat presence/ probable absence survey.

The USFWS published a proposed rule to reclassify the northern long-eared bat as endangered on March 23, 2022. The USFWS must publish a final rule on the northern long-eared bat's status by the end of November 2022 to meet a federal court order. Project proponents may continue to use the current 4(d) rule while the northern long-eared bat remains listed as a threatened species. If the reclassification is finalized, the 4(d) rule will be nullified as the ESA does not allow application of 4(d) rules for species listed as endangered. Therefore, for proposed project activities that may impact northern long-eared bats with a possibility of not being completed prior to the final listing decision in November, we recommend that project proponents discuss with the Ohio Field Office to determine if surveys may be prudent to avoid potential delays to their project timelines resulting from a change to the northern long-eared bat's listing status.

**Exception for Ohio mist-net surveys:** All presence/absence surveys conducted for state listed bat species (Indiana, northern long-eared, little brown, tricolored) should follow the maximum net nights set forth in the federal guidance to be considered valid by ODNR-DOW. Any modifications to this position will be communicated at the time of the site authorization approval. As Ohio's laws do not have a similar liability exclusion comparable to the federal 4d Rule, additional surveys within an existing buffer may not be applicable to ODNR-DOW's recommendations on tree cutting.

### **Ohio Acoustic Surveys:**

Acoustic bat surveys for presence/absence will be accepted by ODNR-DOW for the 2022 season. Surveys should follow guidelines laid out in the USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines (March 2022) with the following exceptions:

- Ohio survey dates are June 1 – August 15, 2022
- After conducting automated analyses using one or more of the currently available 'approved' acoustic bat ID programs<sup>1</sup>, qualitative analysis (i.e., manual vetting) of any calls recorded from state-endangered species (*M. sodalis*, *M. septentrionalis*<sup>2</sup>, *M. lucifugus*<sup>2</sup>, and *P. subflavus*<sup>2</sup>) must be completed.
- **All presence/absence acoustic surveys conducted for state listed bat species (Indiana, northern long-eared, little brown, tricolored) should follow the maximum acoustic nights set forth in the federal guidance to be considered valid by ODNR-DOW. Any modifications to this position will be communicated at the time of the site authorization approval.**

At a minimum, for each detector site/night a program considered presence of state-listed bats likely, review all files (including no IDs) from that site/night. If more than one acoustic bat ID program is used, qualitative analysis must also include a comparison of the results of each program by site and night.

### **Before Field Season:**

- Anyone surveying bats using mist-nets in the state of Ohio must obtain a federal permit as well as a state scientific collection permit. The federal permit should include both the Indiana bat and the northern long-eared bat.
- Your ODNR-DOW permit consists of two documents: a Scientific Collector (Wild Animal) Permit and an endangered species letter signed by the Chief of the Division of Wildlife (in addition to your federal permit).

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<sup>1</sup> <https://www.fws.gov/media/indiana-bat-summer-survey-guidance>

<sup>2</sup> State listing as endangered effective July 1, 2020

Both ODNR-DOW documents must be obtained prior to field work and kept with you and any sub-permittees during field work.

### **During Field Season:**

- Prior to initiation of field work (a minimum of two weeks in advance), permittees must provide proposed mist netting plans to USFWS and ODNR-DOW in the form of an e-mail letter to the USFWS OHFO and copy to the ODNR-DOW Bat Survey Coordinator. Plans must be reviewed and approved by USFWS OHFO and ODNR-DOW before ANY surveys take place. Study plans must specify objectives, location details, dates of proposed work, and all other relevant details. When handling bats, you must strictly adhere to the current WNS Decontamination Protocol (current version can be found at <https://www.whitenosesyndrome.org/topics/decontamination>). Clothing, boots, gear, and equipment should all be thoroughly decontaminated between nights, as well as between netting sites.
- Request bat bands at least two weeks in advance of needing them. Bat bands can be obtained by e-mailing the ODNR-DOW Bat Survey Coordinator with how many bands are needed, current permit number, sizes, and a mailing address. Bands will not be issued until your permits are valid. We have two sizes of bands—2.4 mm and 4.2 mm. The 2.4 mm split metal bat ring made of aluminum alloy is suitable for banding small bats. This band must be placed on all captured Indiana, northern long-eared, little brown, and tricolored bats. The larger 4.2 mm band is suitable for silver-haired (*Lasionycteris noctivagans*), big brown (*Eptesicus fuscus*), and hoary (*Lasiurus cinereus*) bats. You must band all Indiana, northern long-eared, little brown, and tricolored bats with ODNR-DOW bands; therefore, you should not be in the field without the 2.4 mm sized band.
- Only individuals who are named on the ODNR-DOW endangered species letter portion of the permit and on the corresponding federal bat permit may conduct and oversee mist-net surveys. Trained assistants may work on permitted bat activities under the direct and on-site supervision of a named permittee. All bat IDs must be verified by a named permittee. If an Indiana bat and/or northern long-eared bat is captured, the permittee shall notify the USFWS and the ODNR-DOW Bat Survey Coordinator referenced above within 48 hours via email. If a little brown bat or tricolored bat is captured, notify the ODNR-DOW Bat Survey Coordinator only within 48 hours via email. Reports of listed bat captures should include specific information such as spatial location of capture, band information, radio-transmitter frequency information, sex, reproductive status, and age of individual.
- For presence/absence surveys, ODNR-DOW requires all female and juvenile state endangered and threatened bat species (Indiana, northern long-eared, little brown, and tricolored bat) be radio-tracked if caught, in accordance with methods outlined in Appendix D of USFWS 2022 Range-wide Indiana Bat Summer Survey Guidelines.
- If you are taking any biological samples (tissue, fur, blood, etc.), this must be specifically authorized in your state and federal permits and noted in your survey proposal.

### **After Field Season:**

By March 15, you must submit your final ODNR-DOW report(s) from the previous summer. You are not required to fill out the ODNR-DOW Wildlife Diversity Bat Excel Spreadsheet; instead, please forward your USFWS Midwestern US Spreadsheet (found here: <https://www.fws.gov/media/bat-reporting-spreadsheets-2020-2021>) to the ODNR-DOW Bat Survey Coordinator and ODNR-DOW Permit Coordinator and include your state permit number along with an electronic copy of the project report. Electronic summaries emailed during the field season are NOT considered as full compliance of this reporting requirement.

## Ohio Environmental Review Recommendations for projects involving disturbance near potential/known bat hibernacula (cliffs, caves, mines) or tree cutting:

**Step 1:** Coordinate with Ohio Division of Wildlife (DOW) regarding existing records for state-listed endangered bat summer and/or winter occurrence information. Potential hibernacula found during a habitat assessment must address possible suitability for Indiana bats, northern long-eared bats, tricolored bats, and little brown bats.

If project site contains a known bat hibernaculum(a) –

- For state-listed endangered species other than the Indiana bat, a recommendation of 0.25-mile tree cutting buffer around all known entrances to protect existing conditions at the hibernaculum(a). The U.S. Fish and Wildlife Service (USFWS) should be contacted for guidance on projects occurring within 5 miles of known or potential Indiana bat hibernacula. If the project involves subsurface disturbance, consultation with DOW is required.
- Limited tree cutting may be permitted within the buffer. Coordinate with DOW.

If a project site does not contain known bat hibernaculum(a)

- Conduct a desktop habitat assessment of the project area. Tools such as the [ODNR Mines of Ohio Viewer](#), [Karst Interactive Map](#), topographic maps, aerial photos, historical records, etc. should be used to determine if there are any potential caves, mines, karst features, rock ledges, or other features that may serve as potential hibernacula.
  - If no such features are found, proceed to Step 2.
  - If potential hibernacula are found during the desktop assessment:
    - Assume bats are using these hibernacula and refrain from clearing trees from March 15-November 15

**-Or-**

- Conduct a field habitat assessment to determine if a potential hibernaculum(a) is present within the action area. We encourage impacts to ledges and rock outcroppings be avoided. If impacts cannot be avoided, features should be evaluated for potential roosting characteristics such as recesses, overhangs, and crevices.
  - **NOTE:** The USFWS Range-wide Indiana Bat Guidelines, Appendix H, contains instructions for completing a habitat assessment, but only includes criteria for Indiana bat hibernacula.

**Step 2:** When conducted, a presence/absence survey must follow current DOW guidelines.

**Step 3:** If a state-listed endangered bat is captured or recorded during the survey:

- Recommendation of no summer tree cutting, or limited cutting following guidelines detailed below, within 5 miles (or 2.5 miles for tricolored bats) of the capture site if a roost is not located.
- Recommendation of no summer tree cutting, or limited cutting following guidelines detailed below, within 2.5 miles of a roost tree if located.

If no state-listed endangered bat is captured or recorded during the survey:

- Summer tree cutting may proceed for 5 years before a new survey is needed under state guidance.

**Limited summer tree cutting guidance for bats that are only state-listed endangered:** Limited tree cutting in summer may be permitted after consultation with DOW, but clearing trees with the following characteristics should be avoided unless they pose a hazard: dead or live trees of any size with loose, shaggy bark; crevices, holes, or cavities; clusters of dead leaves; live trees of any species with DBH  $\geq 20$ ".

## **FREQUENTLY ASKED QUESTIONS**

### **When does the ODNR-DOW Bat Survey protocol have to be used?**

This protocol should be used anytime Indiana bat, northern long-eared bat, little brown bat, or tricolored bat summer presence/probable absence surveys are conducted in the state of Ohio.

### **How many detector nights are required for presence/probable absence acoustic surveys?**

As described in the current USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines:

Level of effort for all state-listed endangered bat species including Indiana bat and northern long-eared bats: Follow maximum detector nights as outlined in the federal guidance (for northern long-eared bat).

#### Northern Long-eared Bat Level of Effort:

Linear projects: a minimum of 4 detector nights per km (0.6 miles) of suitable summer habitat

Non-linear projects: a minimum of 14 detector nights per 123 acres (0.5 km<sup>2</sup>) of suitable summer habitat.

At least 2 detector locations per 123 acre "site" shall be sampled until at least 8 detector nights has been completed over the course of at least 2 calendar nights (may be consecutive). For example:

- 4 detectors for 3 nights and 1 detector for 2 nights each (can sample the same location or move within the site)
- 2 detectors for 7 nights each (can sample the same location or move within the site)
- 1 detector for 14 nights (must sample at least 2 locations and move within the site – we recommend evenly distributing LOE among locations)

#### Indiana Bat Level of Effort:

Linear projects: a minimum of 4 detector nights per km (0.6 miles) of suitable summer habitat

Non-linear projects: a minimum of 10 detector nights per 123 acres (0.5 km<sup>2</sup>) of suitable summer habitat.

At least 2 detector locations per 123 acre "site" shall be sampled until at least 8 detector nights has been completed over the course of at least 2 calendar nights (may be consecutive). For example:

- 5 detectors for 2 nights each (can sample the same location or move within the site)
- 2 detectors for 5 nights each (can sample the same location or move within the site)
- 1 detector for 10 nights (must sample at least 2 locations and move within the site – we recommend evenly distributing LOE among locations)

### **How many net surveys are required for presence/probable absence?**

Level of effort for all state-listed endangered bat species including Indiana bat and northern long-eared bats: Follow maximum net nights as outlined in the federal guidance (for northern long-eared bat).

Net surveys for northern long-eared bat presence/probable absence shall incorporate, at a minimum, either 16 net nights per square 0.5 kilometer (123 acres) of project area, or four net nights per kilometer for linear projects. For linear projects, there must be at least one net night of survey on two different nights (minimum of two nights). This does not allow for two net nights on a single night for surveys.

Net surveys for Indiana bat presence/probable absence shall incorporate, at a minimum, either nine net nights net nights per square 0.5 kilometer (123 acres) of project area, or two net nights per kilometer for linear projects. For linear projects, there must be at least one net night of survey on two different nights (minimum of two nights). This does not allow for two net nights on a single night for surveys.

**How long are the results of the surveys valid for an assessment of an area?**

Mist-net or acoustic surveys documenting probable absence of state-listed endangered bats are valid for five years.

**When can acoustic or net surveys occur in Ohio?**

In Ohio, acoustic or net surveys may only be conducted from June 1 through August 15 unless indicated otherwise in your state permit. Any surveys outside of the June 1 - August 15 timeframe cannot be used in Ohio to assess the presence/probable absence of state-listed bats.

**Can a presence/probable absence survey be conducted within a known Indiana bat and/or northern long-eared bat capture/detection buffer?**

Surveys generally cannot be used to document presence/probable absence of state-listed endangered bats where presence of the species has already been confirmed by prior surveys.

**What if a project is proposing to clear trees between April 1 and September 30 when bats may be present but no bat records exist in the project area?**

Any Ohio project that is not within a known bat record buffer, and tree clearing between April 1 and September 31 is being proposed, may have a presence/probable absence survey conducted between June 1 and August 15 following the range-wide guidance. If a presence/probable absence survey is not performed, presence of listed bats is assumed.

**How does take of northern long-eared bats differ from Indiana bats?**

Under Ohio law, there is no exemption for take of any listed bat species.

**Where do I get bands?**

If you need bands, email the ODNR-DOW Bat Survey Coordinator at least two weeks in advance with your current ODNR permit number, how many bands in each size (2.4 and 4.2 mm) you will need this season, and a current address to ship the bands.

**Do I have to band every bat?**

No, currently this is optional. However, you are required as per your state permit to band all Indiana, northern long-eared, little brown, and tricolored bats.

**APPENDIX E**

**DESKTOP ASSESSMENT FOR WINTER BAT HABITAT**



American Electric Power  
8600 Smith's Mill Road  
New Albany, OH 43054;  
ajtoohey@aep.com

October 11, 2022

Attention: Mr. John Kessler  
Ohio Department of Natural Resources  
2045 Morse Road, Building E-2  
Columbus, Ohio 43229-6693

Via email: [environmentalreviewrequest@dnr.state.oh.us](mailto:environmentalreviewrequest@dnr.state.oh.us); [NHDRequest@dnr.state.oh.us](mailto:NHDRequest@dnr.state.oh.us)

Reference: Horizon Station Construction, Licking County, Ohio

Dear Mr. Kessler:

AEP Ohio Transmission Company, Inc. (AEP), is formally requesting that the Ohio Department of Natural Resources (ODNR) is requesting an Environmental Review and Natural Heritage Database Request for the proposed Horizon Station Construction Project (Project) located in Licking County, Ohio. The Project consists of building a new, greenfield Horizon substation located within a 64.10-acre parcel in Licking County, Ohio. The location of the new substation is not determined and the extent of the 64.10-acre parcel is established as the environmental review request study area. The Project study area is located on Jersey, Ohio U.S. Geologic Survey 7.5' topographical quadrangle as displayed on the Project Topographic Overview Map (Figure 1).

AECOM completed a desktop review of publicly available data to identify abandoned underground mines within 0.25-mile of the Project area. The data sources utilized include USGS topographical maps, aerial photography, and ODNR's Division of Mineral Resources and Geological Survey Data for Known Mining Activity and Karst Geology/Sinkholes as shown on Figure 1 and 2. Based on the available desktop resources, there are no underground and historic surface mines as well as karst features located within 0.25-mile of the Project. Therefore, potential hibernacula is not anticipated to occur within range of the Project area.

Please provide us with the results of the ODNR's environmental review, including results of the ODNR Natural Heritage Database search, at your earliest convenience. If you have questions or need additional information regarding the Project, please contact me at the phone number or email below. Thank you for your assistance with this request.

Sincerely,

Brian Miller  
Project Manager VIII  
Phone: (412-667-9172); [brian.miller@aecom.com](mailto:brian.miller@aecom.com)

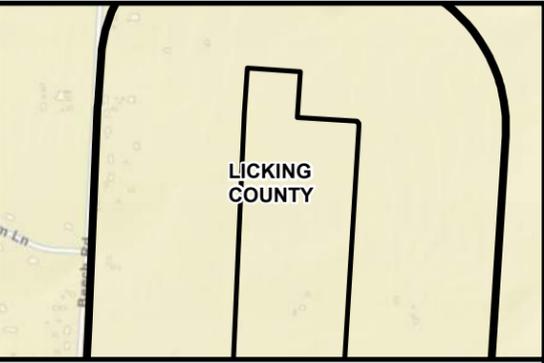
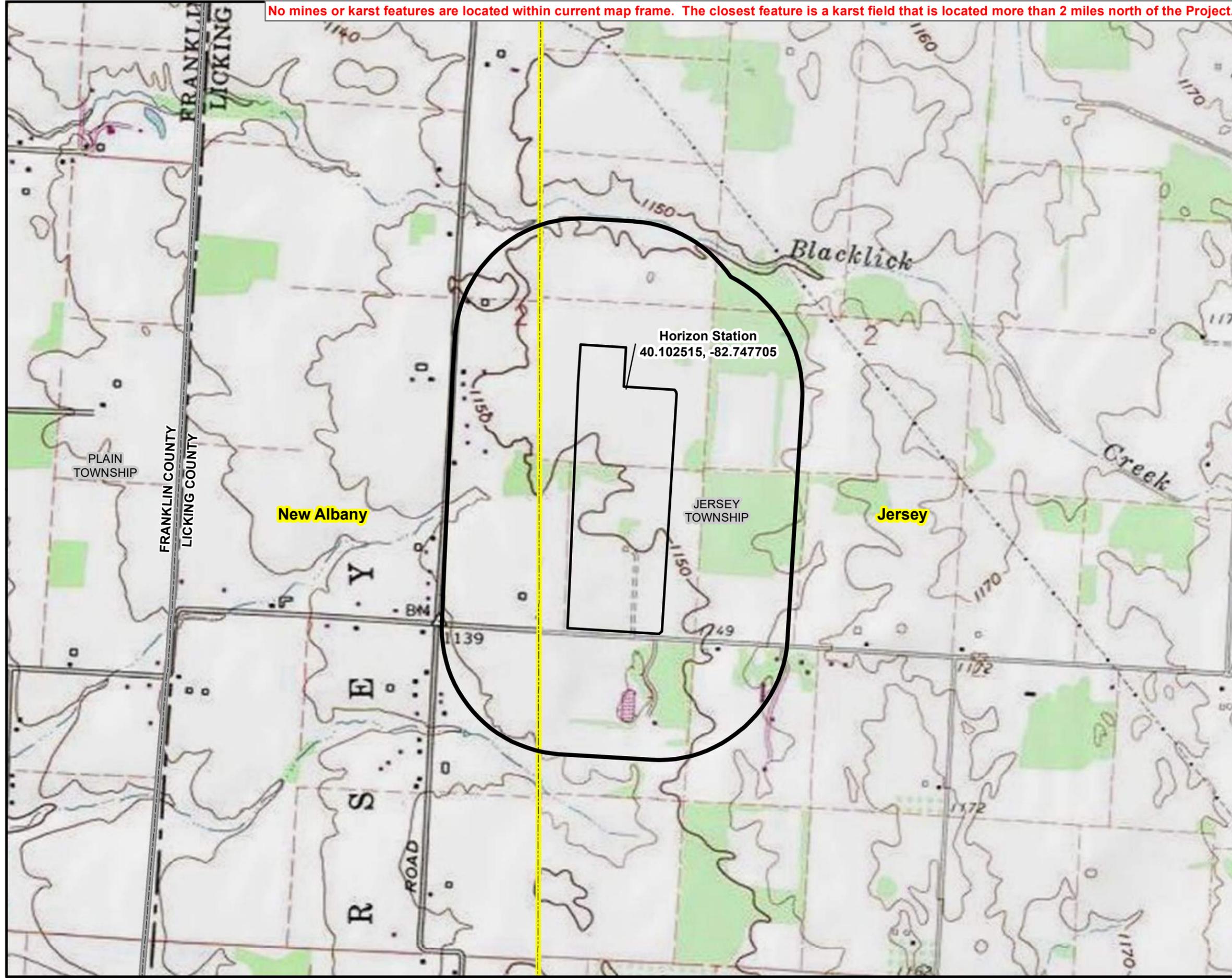
CC: Amy J. Toohey  
Environmental Specialist-Consultant  
Phone: (614-565-1480); [ajtoohey@aep.com](mailto:ajtoohey@aep.com)

Attachments: Figure 1 – Topographic Project Overview;  
Figure 2 – Aerial Project Overview;  
Natural Heritage Data Request Form;  
Electronic Shapefiles(.shp)

BOUNDLESS ENERGY™

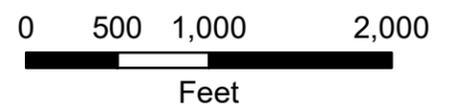
No mines or karst features are located within current map frame. The closest feature is a karst field that is located more than 2 miles north of the Project.

Date Saved: 10/11/2022  
 Document Path: L:\DCS\GIS\ArcMap\_GeoDB\_Projects\ENVI60693887\_AEP\_Horizon\_Station\2\_MXD\1\_Agency\HorizonStation\_Fig1\_ProjectOverview.mxd



**Legend**

-  Horizon Station Study Area
-  Horizon Station Quarter Mile Boundary
-  Ohio USGS 7.5' Topographic Quadrangle
-  Township Boundary
-  County Boundary

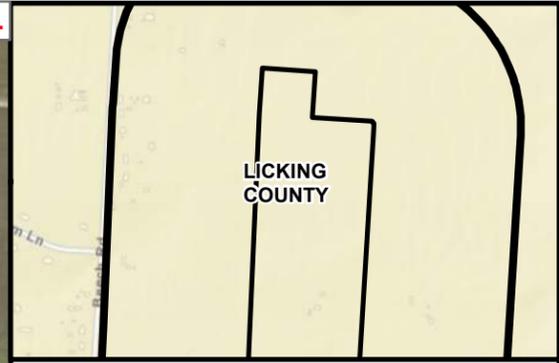
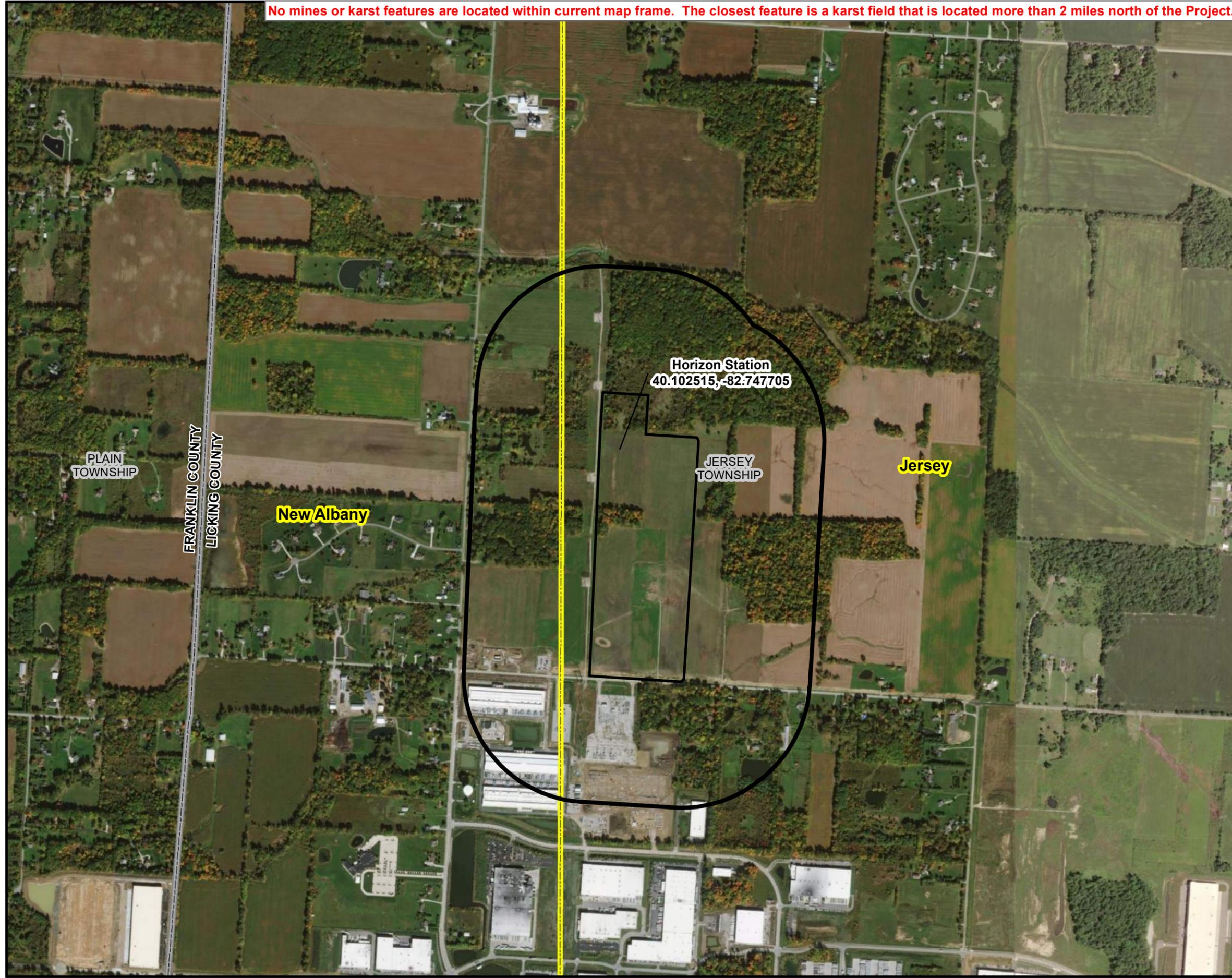


 Horizon Station Construction Project

<b>FIGURE 1</b>	
<b>TOPOGRAPHIC PROJECT OVERVIEW</b>	
DATE: 10/11/2022	1 INCH = 1,000 FEET
CREATED BY: JRS	CHECKED BY: JH
JOB NO.: 60693887	<b>AECOM</b>

No mines or karst features are located within current map frame. The closest feature is a karst field that is located more than 2 miles north of the Project.

Date Saved: 10/11/2022  
Document Path: L:\DCS\GIS\ArcMap\_GeoDB\_Projects\ENVI60693887\_AEP\_Horizon\_Station\2\_MXD\1\_Agency\HorizonStation\_Fig2\_ProjectOverview.mxd



**Legend**

- Horizon Station Study Area
- Horizon Station Quarter Mile Boundary
- Ohio USGS 7.5' Topographic Quadrangle
- Township Boundary
- County Boundary

N

0 500 1,000 2,000  
Feet

Horizon Station Construction Project

**FIGURE 2**  
**AERIAL PROJECT OVERVIEW**

DATE: 10/11/2022	1 INCH = 1,000 FEET
CREATED BY: JRS	CHECKED BY: JH
JOB NO.: 60693887	<b>AECOM</b>

**APPENDIX F**

**EMHT APPROVED JURISDICTIONAL DETERMINATION**

**AND**

**ATTACHMENT 2B: 401 WQC PROPOSED WETLAND IMPACTS TABLE**

**FROM EMHT 401 WQC APPLICATION (Dated April 17, 2019)**



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
HUNTINGTON DISTRICT, CORPS OF  
ENGINEERS  
502 EIGHTH STREET  
HUNTINGTON, WEST VIRGINIA 25701-2070

April 1, 2019

Regulatory Division  
North Branch  
LRH-2018-686-SCR-Blacklick Creek

APPROVED AND PRELIMINARY JURISDICTIONAL DETERMINATIONS

Mr. William Ebbing  
The New Albany Company  
8000 Walton Parkway, Suite 120  
New Albany, Ohio 43054

Dear Mr. Ebbing:

I refer to the *Investigation of Waters of the United States for the North of Jug Street Properties* (report) dated August 15, 2018, and the addendum dated March 11, 2019, submitted on your behalf by EMH&T. You have requested an approved jurisdictional determination (JD) for the non-jurisdictional features and a preliminary JD for the potential jurisdictional aquatic resources on the project site. The property is located east of Beech Road Northwest and north of Jug Street in Jersey Township, in Licking County, Ohio (40.102329 latitude, -82.744114 longitude). Your JD request has been assigned the following file number: LRH-2018-686-SCR-Blacklick Creek. Please reference this number on all future correspondence related to this JD request.

The United States Army Corps of Engineers' (Corps) authority to regulate waters of the United States is based on the definitions and limits of jurisdiction contained in 33 CFR 328, including the amendment to 33 CFR 328.3 (80 Federal Register 37053), and 33 CFR 329. Section 404 of the Clean Water Act (Section 404) requires a Department of the Army (DA) permit be obtained prior to discharging dredged and/or fill material into waters of the United States, including wetlands. Section 10 of the Rivers and Harbors Act of 1899 (Section 10) requires a DA permit be obtained for any work in, on, over or under a navigable water.

***Preliminary Jurisdictional Determination***

Based upon a review of the submitted report, additional information received on March 12, 2019, and a field investigation conducted by a representative of this office on October 16, 2018, this office has determined that approximately 3,348 linear feet (lf) of four (4) streams and 24.27 acres of fifty-three (53) wetlands are present within the 475-acre study area. The aquatic resources identified above and on the enclosed preliminary JD form **may** be waters of the United States in accordance with the Regulatory Guidance Letter for Jurisdictional Determinations (JDs) issued by the Corps on October 31, 2016 (Regulatory Guidance Letter No. 16-01). As indicated in the guidance, this preliminary JD is non-binding and cannot be appealed (33 CFR 331.2) and only provides a written indication that waters of the United States may be present on-site.

You have declined to exercise the option to obtain an approved JD in this instance and at this time for the above aquatic resources. However, for the purposes of the determination of impacts, compensatory mitigation, and other resource protection measures for activities that require authorization from this office, the above aquatic resources will be evaluated as if they are waters of the United States.

Enclosed please find two (2) copies of the Preliminary JD. If you agree with the findings of this Preliminary JD and understand your options regarding the same, please sign and date one (1) copy of the Preliminary JD form and return it to this office within 30 days of receipt of this letter. You should submit the signed copy to the following address:

United States Army Corps of Engineers  
Huntington District Attn: North Branch  
LRH-2018-663-HOC  
502 Eighth Street  
Huntington, West Virginia 25701.

***Approved Jurisdictional Determination***

Based on the information provided, the on-site field verification performed on October 16, 2018, and other information available to us, we have determined that 0.85 acre of two (2) ponds are excluded per 33 CFR 328.3(b)(4)(ii). In addition, there is 645 lf of one (1) ditch within the project area. Ditch 1 was excavated in uplands to drain a failing drain tile system and is excluded per 33 CFR 328.3(b)(3)(iii). Ponds 1-2 and Ditch 1 are not waters of the United States. This jurisdictional verification is valid for a period of five (5) years from the date of this letter unless new information warrants revision of the delineation prior to the expiration date. This letter contains an approved JD for the subject site within the approved JD boundary. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the Great Lakes and Ohio River Division Office at the following address:

Appeal Review Officer  
United States Army Corps of Engineers  
Great Lakes and Ohio River Division  
550 Main Street RM 10524  
Cincinnati, Ohio 45202-3222  
Phone: (513) 684-2699  
Fax: (513) 684-2460.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by May 31, 2019. **It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.**

A copy of this letter is being provided to Mr. Rob Milligan at EMH&T. If you have any questions concerning the above, please contact Mr. Cecil Cox of the North Branch at 304-399-5274, by mail at the above address, or by email at: [cecil.m.cox@usace.army.mil](mailto:cecil.m.cox@usace.army.mil).

Sincerely,

**MOORE.LAURIE**  
**.A.1381411784**

Digitally signed by  
MOORE.LAURIE.A.1381411784  
DN: c=US, o=U.S. Government,  
ou=DoD, ou=PKI, ou=USA,  
cn=MOORE.LAURIE.A.1381411784  
Date: 2019.04.01 14:25:56 -0400

Laurie A. Moore  
Regulatory Project Manager  
North Branch

Enclosures

Cc (by email):

Mr. Rob Milligan

**Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM**

**BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR PJD:** Delineation Report dated August 15, 2018, with supplemental information received on October 19, 2018 and March 12, 2019

**B. NAME AND ADDRESS OF PERSON REQUESTING PJD:**

**Applicant:** William Ebbing  
 The New Albany Company  
 8000 Walton Parkway, Suite 120  
 New Albany, Ohio 43054

**Agent:** Rob Milligan  
 EMH&T  
 5500 New Albany Road  
 New Albany, Ohio 43054

**C. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Huntington District –North Branch; LRH-2018-686-SCR-Blacklick Creek;North of Jug Street Properties

**D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:  
 (USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)**

State: Ohio                                      County: Licking                                      City: Jersey Township

Center coordinates of site (lat/long in degree decimal): 40.101513, -82.741913

Name of nearest waterbody: Blacklick Creek

Identify (estimate) amount of waters in the review area:

Non-wetland waters: 3,348 linear feet of four (4) streams

Wetlands: 53 wetlands comprising of 24.27 acres

**E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

Office (Desk) Determination. Date(s): October 26, 2018

Field Determination. Date(s): October 16, 2018

Site Number	Latitude	Longitude	Estimated amount of aquatic resource in review area (acreage/linear feet)	Type of aquatic resource	Geographic authority to which the aquatic resource “may be” subject
Wetland A	40.10088	-82.73906	0.26 acre	Wetland	Section 404
Wetland B	40.10089	-82.73999	0.47 acre	Wetland	Section 404
Wetland C	40.10092	-82.73802	0.05 acre	Wetland	Section 404
Wetland D	40.10144	-82.74068	0.35 acre	Wetland	Section 404
Wetland E	40.10102	-82.73759	0.08 acre	Wetland	Section 404
Wetland F	40.10226	-82.74155	0.16 acre	Wetland	Section 404
Wetland G	40.09970	-82.74091	0.16 acre	Wetland	Section 404

<b>Site Number</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Estimated amount of aquatic resource in review area (acreage/linear feet)</b>	<b>Type of aquatic resource</b>	<b>Geographic authority to which the aquatic resource "may be" subject</b>
Wetland H	40.09918	-82.74102	0.09 acre	Wetland	Section 404
Wetland I	40.10085	-82.74311	2.50 acre	Wetland	Section 404
Wetland J	40.10038	-82.74132	0.41 acre	Wetland	Section 404
Wetland K	40.09926	-82.74243	0.02 acre	Wetland	Section 404
Wetland L	40.10155	-82.74135	0.07 acre	Wetland	Section 404
Wetland M	40.09986	-82.74340	0.43 acre	Wetland	Section 404
Wetland N	40.10065	-82.74207	0.03 acre	Wetland	Section 404
Wetland O	40.10491	-82.74257	1.78 acre	Wetland	Section 404
Wetland P	40.09957	-82.74236	1.66 acre	Wetland	Section 404
Wetland Q	40.10453	-82.74336	0.08 acre	Wetland	Section 404
Wetland R	40.09924	-82.74168	0.24 acre	Wetland	Section 404
Wetland S	40.10472	-82.74069	0.28 acre	Wetland	Section 404
Wetland T	40.09902	-82.74237	0.05 acre	Wetland	Section 404
Wetland U	40.10561	-82.74048	2.04 acre	Wetland	Section 404
Wetland V	40.10469	-82.73994	0.09 acre	Wetland	Section 404
Wetland W	40.10467	-82.73996	0.15 acre	Wetland	Section 404
Wetland X	40.10293	-82.74087	0.25 acre	Wetland	Section 404
Wetland Y	40.09741	-82.74334	0.02 acre	Wetland	Section 404
Wetland Z	40.10673	-82.74645	2.82 acre	Wetland	Section 404
Wetland AA	40.10697	-82.74491	0.97 acre	Wetland	Section 404
Wetland BB	40.10817	-82.74442	0.40 acre	Wetland	Section 404
Wetland CC	40.10748	-82.74447	0.06 acre	Wetland	Section 404
Wetland DD	40.09770	-82.74179	0.09 acre	Wetland	Section 404
Wetland EE	40.10785	-82.74569	0.15 acre	Wetland	Section 404
Wetland FF	40.10855	-82.74551	0.15 acre	Wetland	Section 404
Wetland GG	40.10840	-82.74765	0.17 acre	Wetland	Section 404
Wetland HH	40.10765	-82.74777	0.18 acre	Wetland	Section 404
Wetland II	40.10556	-82.74372	0.06 acre	Wetland	Section 404
Wetland JJ	40.10619	-82.74781	0.44 acre	Wetland	Section 404
Wetland KK	40.10596	-82.74830	0.04 acre	Wetland	Section 404
Wetland LL	40.10435	-82.749939	1.60 acre	Wetland	Section 404
Wetland MM	40.10541	-82.75033	0.23 acre	Wetland	Section 404
Wetland NN	40.10459	-82.75051	0.18 acre	Wetland	Section 404
Wetland OO	40.10440	-82.75142	0.19 acre	Wetland	Section 404
Wetland PP	40.10215	-82.74416	1.05 acre	Wetland	Section 404
Wetland QQ	40.09812	-82.74842	0.37 acre	Wetland	Section 404
Wetland RR	40.10163	-82.74798	0.39 acre	Wetland	Section 404
Wetland SS	40.10166	-82.74985	0.41 acre	Wetland	Section 404
Wetland TT	40.10211	-82.5022	0.02 acre	Wetland	Section 404
Wetland UU	40.10223	-82.75087	0.17 acre	Wetland	Section 404
Wetland VV	40.10080	-82.75149	0.38 acre	Wetland	Section 404
Wetland WW	40.10107	-82.75205	0.13 acre	Wetland	Section 404
Wetland XX	40.10130	-82.75282	1.65 acre	Wetland	Section 404

Wetland YY	40.10120	-82.75099	0.20 acre	Wetland	Section 404
Wetland ZZ	40.09803	-82.74086	0.03 acre	Wetland	Section 404
Wetland AAA	40.09833	-82.74049	0.02 acre	Wetland	Section 404
Stream 1	40.108671	-82.751223	1,289 lf (0.27 acre)	Perennial	Section 404
Stream 2	40.105064	-82.733787	774 lf (0.09 acre)	Ephemeral	Section 404
Stream 3	40.100560	-82.751526	1,172 lf (0.13 acre)	Intermittent	Section 404
Stream 4	40.108907	-82.752506	113 lf (0.01 acre)	Ephemeral	Section 404

1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.

2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring “pre-construction notification” (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant’s acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there “*may be*” waters of the U.S. and/or that there “*may be*” navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

**SUPPORTING DATA. Data reviewed for PJD (check all that apply)**

Checked items should be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Exhibit 6: Delineation Map (Received as supplemental information on October 19, 2018) and addendum dated 11 March 2019
- Data sheets prepared/submitted by or on behalf of the /consultant applicant: Investigation of Waters of the United States for the North of Jug Street Property, submitted by EMH&T.
  - Office concurs with data sheets/delineation report
  - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:.
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: USGS 7.5-Minute Topographic Map- New Albany and Jersey Quads (Exhibit 2)
- USDA Natural Resources Conservation Service Soil Survey: Exhibits 3A and 3B
- National wetlands inventory map(s). Cite name: Exhibit 4
- State/Local wetland inventory map(s):
- FEMA/FIRM maps: Exhibit 5
- 100-year Floodplain Elevation is:  
(National Geodectic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): Exhibit 6-Delineation Map
- or  Other (Name & Date): Site Photos (1-60)
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify):

**IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.**

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Signature and date of Regulatory staff member completing PJD

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Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)

**ATTACHMENT 2B:**

**401 WQC Proposed Wetland Impacts Tables**



# Application for Section 401 Water Quality Certification — Proposed Wetland Impacts and Mitigation

Division of Surface Water 401 Water Quality Certification and Isolated Wetland Permitting Unit

Wetland ID	ORAM Score	Category	Cat. Verified by Ohio EPA?	Ohio EPA Staff Who Verified	Acreage Onsite	Proposed Impacts		
						Impact Acreage		Impact Type
						Forested	Non	
Wetland A	42.00	2	<input checked="" type="checkbox"/>	Boyles	0.26	0.26	0.00	Fill
Wetland B	40.00	2	<input checked="" type="checkbox"/>	Boyles	0.47	0.47	0.00	Fill
Wetland C	33.00	2	<input checked="" type="checkbox"/>	Boyles	0.05	0.05	0.00	Fill
Wetland D	45.00	2	<input checked="" type="checkbox"/>	Boyles	0.35	0.35	0.00	Fill
Wetland E	32.00	2	<input checked="" type="checkbox"/>	Boyles	0.08	0.08	0.00	Fill
Wetland F	14.00	1	<input checked="" type="checkbox"/>	Boyles	0.16	0.00	0.16	Fill
Wetland G	48.00	2	<input checked="" type="checkbox"/>	Boyles	0.16	0.16	0.00	Fill
Wetland H	44.00	2	<input checked="" type="checkbox"/>	Boyles	0.09	0.09	0.00	Fill
Wetland I	41.00	2	<input checked="" type="checkbox"/>	Boyles	2.50	2.50	0.00	Fill
Wetland J	47.00	2	<input checked="" type="checkbox"/>	Boyles	0.41	0.41	0.00	Fill
Wetland K	34.00	2	<input checked="" type="checkbox"/>	Boyles	0.02	0.02	0.00	Fill
Wetland L	37.00	2	<input checked="" type="checkbox"/>	Boyles	0.07	0.07	0.00	Fill
<b>Wetland Acreage Totals</b>					4.62	4.46	0.16	
<b>Totals – Category 1 Wetlands</b>					0.16	0.00	0.16	
<b>Totals – Category 2 Wetlands</b>					4.46	4.46	0.00	
<b>Totals – Category 3 Wetlands</b>					0.00	0.00	0.00	

Proposed Wetland Mitigation (Check All That Apply)			
<input type="checkbox"/> <b>Wetland Mitigation Bank</b>  Mitigation Bank: Choose an item.	<b>Number of Forested Credits:</b>  <b>Number of Non-Forested Credits:</b>  <b>Number of Buffer Credits:</b>	<b>Type of Credits (if applicable):</b> Choose an item.  <b>Type of Credits (if applicable):</b> Choose an item.  <b>Type of Credits (if applicable):</b> Choose an item.	<b>Proof of Reservation?</b> <input type="checkbox"/>
<input type="checkbox"/> <b>In-Lieu Fee Program</b>	ILF Sponsor: Choose an item.	<b>Number of Wetland Credits:</b>  <b>Number of Buffer Credits:</b>	<b>Proof of Reservation?</b> <input type="checkbox"/>
<input checked="" type="checkbox"/> <b>Permittee-Responsible Mitigation</b>	<input checked="" type="checkbox"/> <b>Reestablishment (Restoration)</b> Forested See text Acres  <input checked="" type="checkbox"/> <b>Preservation</b> Forested 6.64 Acres  <input checked="" type="checkbox"/> <b>Other</b> Forested upland buffer preservation/enhancement – see text	<input checked="" type="checkbox"/> <b>Rehabilitation (Enhancement)</b> Forested 2.64 Acres  <input type="checkbox"/> <b>Establishment (Creation)</b> Choose an item. Acres	



# Application for Section 401 Water Quality Certification — Proposed Wetland Impacts and Mitigation

Division of Surface Water 401 Water Quality Certification and Isolated Wetland Permitting Unit

Wetland ID	ORAM Score	Category	Cat. Verified by Ohio EPA?	Ohio EPA Staff Who Verified	Acreage Onsite	Proposed Impacts		
						Impact Acreage		Impact Type
						Forested	Non	
Wetland M	39.00	2	<input checked="" type="checkbox"/>	Boyles	0.43	0.43	0.00	Fill
Wetland N	35.00	2	<input checked="" type="checkbox"/>	Boyles	0.03	0.03	0.00	Fill
Wetland O	67.50	3	<input checked="" type="checkbox"/>	Boyles	1.78	0.00	0.00	Choose an item.
Wetland P	37.00	2	<input checked="" type="checkbox"/>	Boyles	1.66	0.96	0.70	Fill
Wetland Q	36.00	2	<input checked="" type="checkbox"/>	Boyles	0.08	0.00	0.00	Choose an item.
Wetland R	38.00	2	<input checked="" type="checkbox"/>	Boyles	0.24	0.24	0.00	Fill
Wetland S	46.00	2	<input checked="" type="checkbox"/>	Boyles	0.28	0.28	0.00	Fill
Wetland T	31.00	2	<input checked="" type="checkbox"/>	Boyles	0.05	0.05	0.00	Fill
Wetland U	65.50	3	<input checked="" type="checkbox"/>	Boyles	2.04	0.00	0.00	Choose an item.
Wetland V	39.00	2	<input checked="" type="checkbox"/>	Boyles	0.09	0.09	0.00	Fill
Wetland W	39.00	2	<input checked="" type="checkbox"/>	Boyles	0.15	0.15	0.00	Fill
Wetland X	22.00	1	<input checked="" type="checkbox"/>	Boyles	0.25	0.05	0.20	Fill
<b>Wetland Acreage Totals</b>					<b>7.08</b>	<b>2.28</b>	<b>0.90</b>	
<b>Totals – Category 1 Wetlands</b>					<b>0.25</b>	<b>0.05</b>	<b>0.20</b>	
<b>Totals – Category 2 Wetlands</b>					<b>3.01</b>	<b>2.23</b>	<b>0.70</b>	
<b>Totals – Category 3 Wetlands</b>					<b>3.82</b>	<b>0.00</b>	<b>0.00</b>	

Proposed Wetland Mitigation (Check All That Apply)			
<input type="checkbox"/> <b>Wetland Mitigation Bank</b> Mitigation Bank: Choose an item.	<b>Number of Forested Credits:</b>  <b>Number of Non-Forested Credits:</b>  <b>Number of Buffer Credits:</b>	<b>Type of Credits (if applicable):</b> Choose an item.  <b>Type of Credits (if applicable):</b> Choose an item.  <b>Type of Credits (if applicable):</b> Choose an item.	<b>Proof of Reservation?</b> <input type="checkbox"/>
<input type="checkbox"/> <b>In-Lieu Fee Program</b>	ILF Sponsor: Choose an item.	<b>Number of Wetland Credits:</b>  <b>Number of Buffer Credits:</b>	<b>Proof of Reservation?</b> <input type="checkbox"/>
<input checked="" type="checkbox"/> <b>Permittee-Responsible Mitigation</b>	<input checked="" type="checkbox"/> <b>Reestablishment (Restoration)</b> Forested See text Acres  <input checked="" type="checkbox"/> <b>Preservation</b> Forested 6.64 Acres  <input checked="" type="checkbox"/> <b>Other</b> Forested upland buffer preservation/enhancement – see text	<input checked="" type="checkbox"/> <b>Rehabilitation (Enhancement)</b> Forested 2.64 Acres  <input type="checkbox"/> <b>Establishment (Creation)</b> Choose an item. Acres	



# Application for Section 401 Water Quality Certification — Proposed Wetland Impacts and Mitigation

Division of Surface Water 401 Water Quality Certification and Isolated Wetland Permitting Unit

Wetland ID	ORAM Score	Category	Cat. Verified by Ohio EPA?	Ohio EPA Staff Who Verified	Acreage Onsite	Proposed Impacts		
						Impact Acreage		Impact Type
						Forested	Non	
Wetland KK	27.00	1	<input checked="" type="checkbox"/>	Boyles	0.04	0.00	0.00	Choose an item.
Wetland LL	37.00	2	<input checked="" type="checkbox"/>	Boyles	1.60	0.35	1.25	Fill
Wetland MM	26.00	1	<input checked="" type="checkbox"/>	Boyles	0.23	0.00	0.23	Fill
Wetland NN	36.00	2	<input checked="" type="checkbox"/>	Boyles	0.18	0.18	0.00	Fill
Wetland OO	32.00	2	<input checked="" type="checkbox"/>	Boyles	0.19	0.19	0.00	Fill
Wetland PP	44.00	2	<input checked="" type="checkbox"/>	Boyles	1.05	1.05	0.00	Fill
Wetland QQ	24.00	1	<input checked="" type="checkbox"/>	Boyles	0.37	0.00	0.37	Fill
Wetland RR	34.00	2	<input checked="" type="checkbox"/>	Boyles	0.39	0.39	0.00	Fill
Wetland SS	36.00	2	<input checked="" type="checkbox"/>	Boyles	0.41	0.41	0.00	Fill
Wetland TT	32.00	2	<input checked="" type="checkbox"/>	Boyles	0.02	0.02	0.00	Fill
Wetland UU	42.00	2	<input checked="" type="checkbox"/>	Boyles	0.17	0.17	0.00	Fill
Wetland VV	30.00	2	<input checked="" type="checkbox"/>	Boyles	0.38	0.38	0.00	Fill
<b>Wetland Acreage Totals</b>					5.03	3.14	1.85	
<b>Totals – Category 1 Wetlands</b>					0.64	0.00	0.60	
<b>Totals – Category 2 Wetlands</b>					4.39	3.14	1.25	
<b>Totals – Category 3 Wetlands</b>					0.00	0.00	0.00	

Proposed Wetland Mitigation (Check All That Apply)			
<input type="checkbox"/> <b>Wetland Mitigation Bank</b> Mitigation Bank: Choose an item.	<b>Number of Forested Credits:</b>	<b>Type of Credits (if applicable):</b> Choose an item.	<b>Proof of Reservation?</b> <input type="checkbox"/>
	<b>Number of Non-Forested Credits:</b>	<b>Type of Credits (if applicable):</b> Choose an item.	
	<b>Number of Buffer Credits:</b>	<b>Type of Credits (if applicable):</b> Choose an item.	
<input type="checkbox"/> <b>In-Lieu Fee Program</b>	<b>ILF Sponsor:</b> Choose an item.	<b>Number of Wetland Credits:</b>	<b>Proof of Reservation?</b> <input type="checkbox"/>
		<b>Number of Buffer Credits:</b>	
<input checked="" type="checkbox"/> <b>Permittee-Responsible Mitigation</b>	<input checked="" type="checkbox"/> <b>Reestablishment (Restoration)</b> Forested See text Acres	<input checked="" type="checkbox"/> <b>Rehabilitation (Enhancement)</b> Forested 2.64 Acres	
	<input checked="" type="checkbox"/> <b>Preservation</b> Forested 6.64 Acres	<input type="checkbox"/> <b>Establishment (Creation)</b> Choose an item. Acres	
	<input checked="" type="checkbox"/> <b>Other</b> Forested upland buffer preservation/enhancement – see text		



# Application for Section 401 Water Quality Certification — Proposed Wetland Impacts and Mitigation

Division of Surface Water 401 Water Quality Certification and Isolated Wetland Permitting Unit

Wetland ID	ORAM Score	Category	Cat. Verified by Ohio EPA?	Ohio EPA Staff Who Verified	Acreage Onsite	Proposed Impacts		
						Impact Acreage		Impact Type
						Forested	Non	
Wetland Y	16.00	1	<input checked="" type="checkbox"/>	Boyles	0.02	0.00	0.02	Fill
Wetland Z	62.00	3	<input checked="" type="checkbox"/>	Boyles	2.82	0.00	0.00	Choose an item.
Wetland AA	53.00	2	<input checked="" type="checkbox"/>	Boyles	0.97	0.00	0.00	Choose an item.
Wetland BB	49.00	2	<input checked="" type="checkbox"/>	Boyles	0.40	0.00	0.00	Choose an item.
Wetland CC	44.00	2	<input checked="" type="checkbox"/>	Boyles	0.06	0.00	0.00	Choose an item.
Wetland DD	16.00	1	<input checked="" type="checkbox"/>	Boyles	0.09	0.00	0.09	Fill
Wetland EE	50.00	2	<input checked="" type="checkbox"/>	Boyles	0.15	0.00	0.00	Choose an item.
Wetland FF	48.00	2	<input checked="" type="checkbox"/>	Boyles	0.15	0.00	0.00	Choose an item.
Wetland GG	35.00	2	<input checked="" type="checkbox"/>	Boyles	0.17	0.00	0.00	Choose an item.
Wetland HH	37.00	2	<input checked="" type="checkbox"/>	Boyles	0.18	0.00	0.00	Choose an item.
Wetland II	43.00	2	<input checked="" type="checkbox"/>	Boyles	0.06	0.06	0.00	Fill
Wetland JJ	41.00	2	<input checked="" type="checkbox"/>	Boyles	0.44	0.00	0.00	Choose an item.
<b>Wetland Acreage Totals</b>					5.51	0.06	0.11	
<b>Totals – Category 1 Wetlands</b>					0.11	0.00	0.11	
<b>Totals – Category 2 Wetlands</b>					2.58	0.06	0.00	
<b>Totals – Category 3 Wetlands</b>					2.82	0.00	0.00	

Proposed Wetland Mitigation (Check All That Apply)			
<input type="checkbox"/> <b>Wetland Mitigation Bank</b> Mitigation Bank: Choose an item.	<b>Number of Forested Credits:</b>  <b>Number of Non-Forested Credits:</b>  <b>Number of Buffer Credits:</b>	<b>Type of Credits (if applicable):</b> Choose an item.  <b>Type of Credits (if applicable):</b> Choose an item.  <b>Type of Credits (if applicable):</b> Choose an item.	<b>Proof of Reservation?</b> <input type="checkbox"/>
<input type="checkbox"/> <b>In-Lieu Fee Program</b>	ILF Sponsor: Choose an item.	<b>Number of Wetland Credits:</b>  <b>Number of Buffer Credits:</b>	<b>Proof of Reservation?</b> <input type="checkbox"/>
<input checked="" type="checkbox"/> <b>Permittee-Responsible Mitigation</b>	<input checked="" type="checkbox"/> <b>Reestablishment (Restoration)</b> Forested See text Acres  <input checked="" type="checkbox"/> <b>Preservation</b> Forested 6.64 Acres  <input checked="" type="checkbox"/> <b>Other</b> Forested upland buffer preservation/enhancement – see text	<input checked="" type="checkbox"/> <b>Rehabilitation (Enhancement)</b> Forested 2.64 Acres  <input type="checkbox"/> <b>Establishment (Creation)</b> Choose an item. Acres	



# Application for Section 401 Water Quality Certification — Proposed Wetland Impacts and Mitigation

Division of Surface Water 401 Water Quality Certification and Isolated Wetland Permitting Unit

Wetland ID	ORAM Score	Category	Cat. Verified by Ohio EPA?	Ohio EPA Staff Who Verified	Acreage Onsite	Proposed Impacts		
						Impact Acreage		Impact Type
						Forested	Non	
Wetland WW	25.00	1	<input checked="" type="checkbox"/>	Boyles	0.13	0.13	0.00	Fill
Wetland XX	30.00	2	<input checked="" type="checkbox"/>	Boyles	1.65	1.65	0.00	Fill
Wetland YY	31.00	2	<input checked="" type="checkbox"/>	Boyles	0.20	0.20	0.00	Fill
Wetland ZZ	16.00	1	<input checked="" type="checkbox"/>	Boyles	0.03	0.00	0.03	Fill
Wetland AAA	16.00	1	<input checked="" type="checkbox"/>	Boyles	0.02	0.00	0.02	Fill
Click here to enter text.		1	<input type="checkbox"/>	Choose an item.				Choose an item.
Click here to enter text.		1	<input type="checkbox"/>	Choose an item.				Choose an item.
Click here to enter text.		1	<input type="checkbox"/>	Choose an item.				Choose an item.
Click here to enter text.		1	<input type="checkbox"/>	Choose an item.				Choose an item.
Click here to enter text.		1	<input type="checkbox"/>	Choose an item.				Choose an item.
Click here to enter text.		1	<input type="checkbox"/>	Choose an item.				Choose an item.
Click here to enter text.		1	<input type="checkbox"/>	Choose an item.				Choose an item.
<b>Wetland Acreage Totals</b>					<b>2.03</b>	<b>1.98</b>	<b>0.05</b>	
<b>Totals – Category 1 Wetlands</b>					<b>0.18</b>	<b>0.13</b>	<b>0.05</b>	
<b>Totals – Category 2 Wetlands</b>					<b>1.85</b>	<b>1.85</b>	<b>0.00</b>	
<b>Totals – Category 3 Wetlands</b>					<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	

Proposed Wetland Mitigation (Check All That Apply)			
<input type="checkbox"/> <b>Wetland Mitigation Bank</b> Mitigation Bank: Choose an item.	<b>Number of Forested Credits:</b>  <b>Number of Non-Forested Credits:</b>  <b>Number of Buffer Credits:</b>	<b>Type of Credits (if applicable):</b> Choose an item.  <b>Type of Credits (if applicable):</b> Choose an item.  <b>Type of Credits (if applicable):</b> Choose an item.	<b>Proof of Reservation?</b> <input type="checkbox"/>
<input type="checkbox"/> <b>In-Lieu Fee Program</b>	ILF Sponsor: Choose an item.	<b>Number of Wetland Credits:</b>  <b>Number of Buffer Credits:</b>	<b>Proof of Reservation?</b> <input type="checkbox"/>
<input checked="" type="checkbox"/> <b>Permittee-Responsible Mitigation</b>	<input checked="" type="checkbox"/> <b>Reestablishment (Restoration)</b> Forested See text Acres  <input checked="" type="checkbox"/> <b>Preservation</b> Forested 6.64 Acres  <input checked="" type="checkbox"/> <b>Other</b> Forested upland buffer preservation/enhancement – see text	<input checked="" type="checkbox"/> <b>Rehabilitation (Enhancement)</b> Forested 2.64 Acres  <input type="checkbox"/> <b>Establishment (Creation)</b> Choose an item. Acres	



# Application for Section 401 Water Quality Certification – Proposed Wetland Impacts and Mitigation

Division of Surface Water 401 Water Quality Certification and Isolated Wetland Permitting Unit

Wetland Impact Summary	Acreage Onsite	Proposed Impacts	
		Impact Acreage	
		Forested	Non
Wetland Impacts – Page 1	4.62	4.46	0.16
Category 1 – Page 1	0.16	0	0.16
Category 2 – Page 1	4.46	4.46	0
Category 3 – Page 1	0	0	0
Wetland Impacts – Page 2	7.08	2.28	0.90
Category 1 – Page 2	0.25	0.05	0.20
Category 2 – Page 2	3.01	2.23	0.70
Category 3 – Page 2	3.82	0	0
Wetland Impacts – Page 3	5.51	0.06	0.11
Category 1 – Page 3	0.11	0	0.11
Category 2 – Page 3	2.58	0.06	0
Category 3 – Page 3	2.82	0	0
Wetland Impacts – Page 4	5.03	3.14	1.85
Category 1 – Page 4	0.64	0	0.60
Category 2 – Page 4	4.39	3.14	1.25
Category 3 – Page 4	0	0	0
Wetland Impacts – Page 5	2.03	1.98	0.05
Category 1 – Page 5	0.18	0.13	0.05
Category 2 – Page 5	1.85	1.85	0
Category 3 – Page 5	0	0	0
<b>Wetland Acreage Totals</b>	<b>24.27</b>	<b>11.92</b>	<b>3.07</b>
<b>Totals – Category 1 Wetlands</b>	<b>1.34</b>	<b>0.18</b>	<b>1.12</b>
<b>Totals – Category 2 Wetlands</b>	<b>16.29</b>	<b>11.74</b>	<b>1.95</b>
<b>Totals – Category 3 Wetlands</b>	<b>6.64</b>	<b>0</b>	<b>0</b>

**This foregoing document was electronically filed with the Public Utilities  
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**Case No(s). 24-0670-EL-BNR**

Summary: Notice Construction Notice electronically filed by Hector Garcia-Santana  
on behalf of AEP Ohio Transmission Company, Inc..